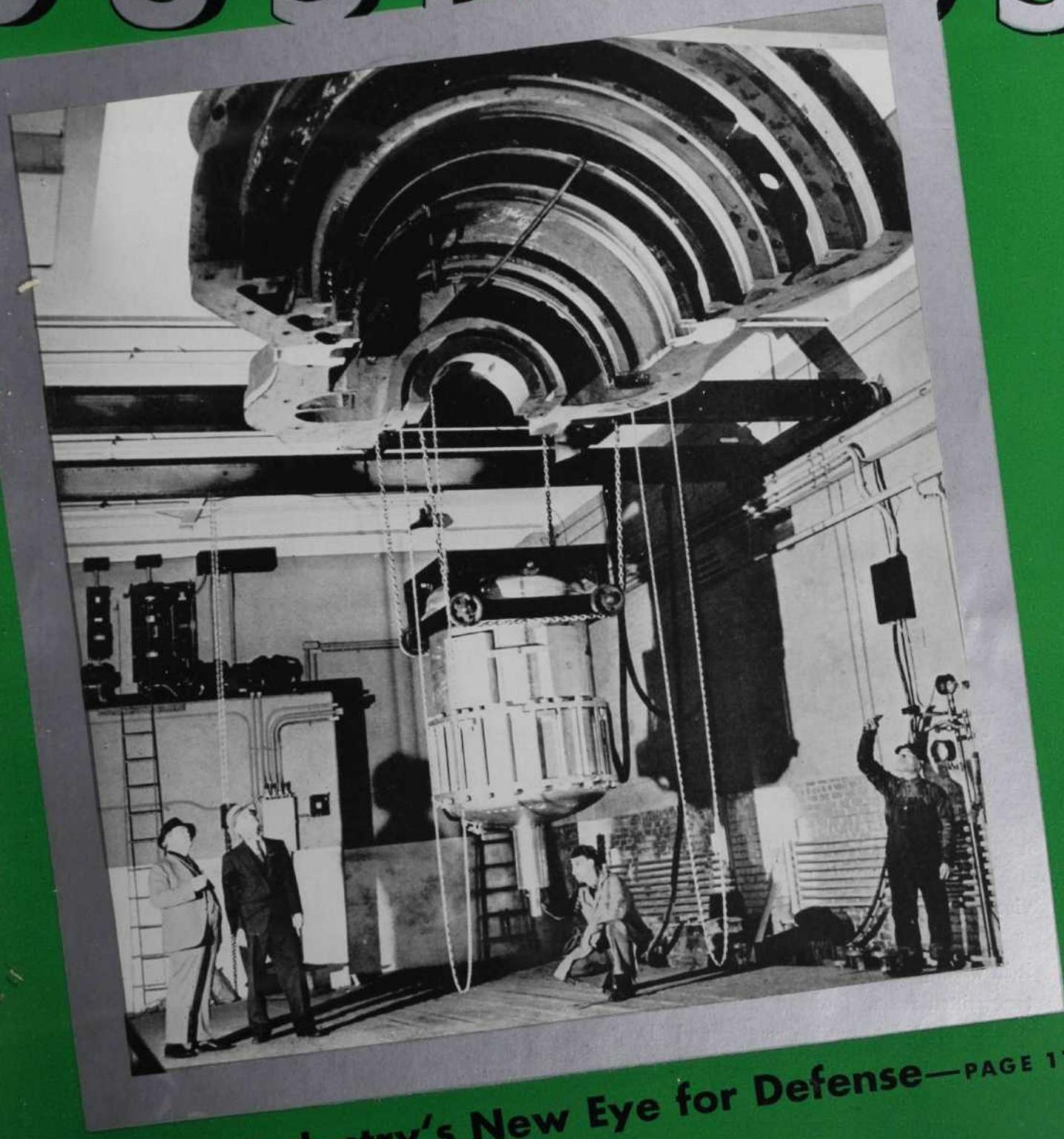
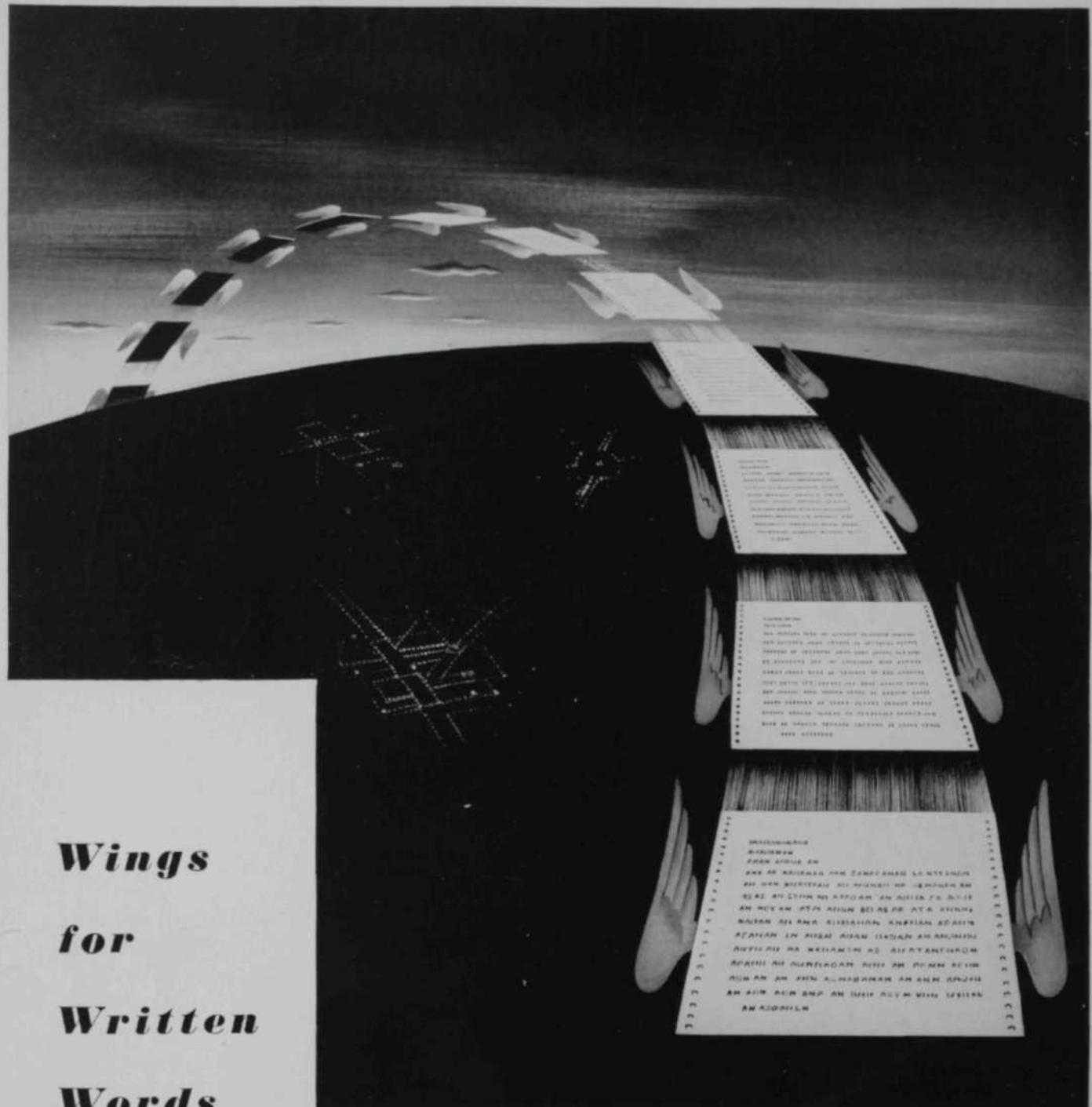


NATION'S BUSINESS



Industry's New Eye for Defense—PAGE 11

February • 1941



**Wings
for
Written
Words**

On swift electric wings, Bell System Teletypewriter Service flashes business messages *instantly*, any distance.

Accuracy is assured, because the teletype "puts it in writing"—transmits every word exchanged in typewritten form. Carbons in the sending and receiving machines provide routing and filing copies at every point of contact. Error is minimized.

All types of businesses use the teletype . . . to co-ordinate scattered units . . . rush orders to distant plants . . . speed up customer service. You may already have benefited by its efficiencies. Yet increased usage, or more strategic application of your present teletypewriter service, might yield still further economies. A Bell System representative will help analyze your existing set-up. Call him through your local telephone office.



BELL SYSTEM TELETYPewriter SERVICE

See the Quality Chart— then Compare Prices!

THE 1941 QUALITY CHART

A Comparison of "All Three" Low-Priced Cars with Leading High-priced Cars in Quality Features

		Here's How "All Three" Low-Priced Cars Compare in the 22 Important Features Found in High-Priced Cars—																						TOTAL
		Plymouth has 21 Car 2 has 9... Car 3 has 7																						
\$2895 CAR	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	22
\$2595 CAR	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	22
\$1594 CAR	YES	YES	YES	YES	NO	YES	21																	
LOWEST-PRICED PLYMOUTH	YES	YES	YES	YES	YES	YES	NO	YES	(21)															
LOWEST-PRICED CAR "2"	NO	YES	NO	9																				
LOWEST-PRICED CAR "3"	NO	YES	YES	NO	NO	NO	NO	YES	YES	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	YES	NO	NO	7

BUY WISELY! Compare Carefully the 1941 Features of "All 3" Low-Priced Cars!

PLYMOUTH IS MOST LIKE THE HIGH-PRICED CARS



OF 22 IMPORTANT FEATURES FOUND IN HIGH-PRICED CARS:
PLYMOUTH HAS 21...CAR "2" HAS 9...CAR "3" HAS 7

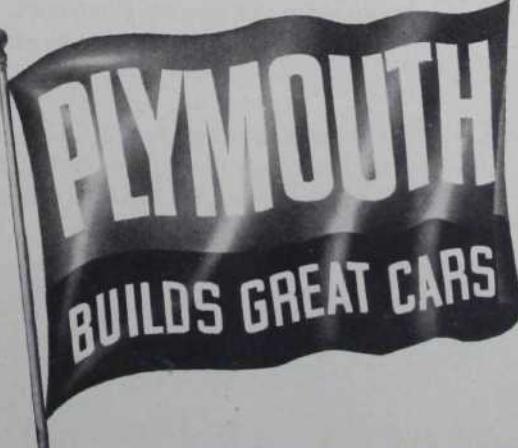
IT'S A revealing picture—your 1941 Quality Chart! And it shows clearly the extra size, comfort, safety and economy the new Plymouth gives you!

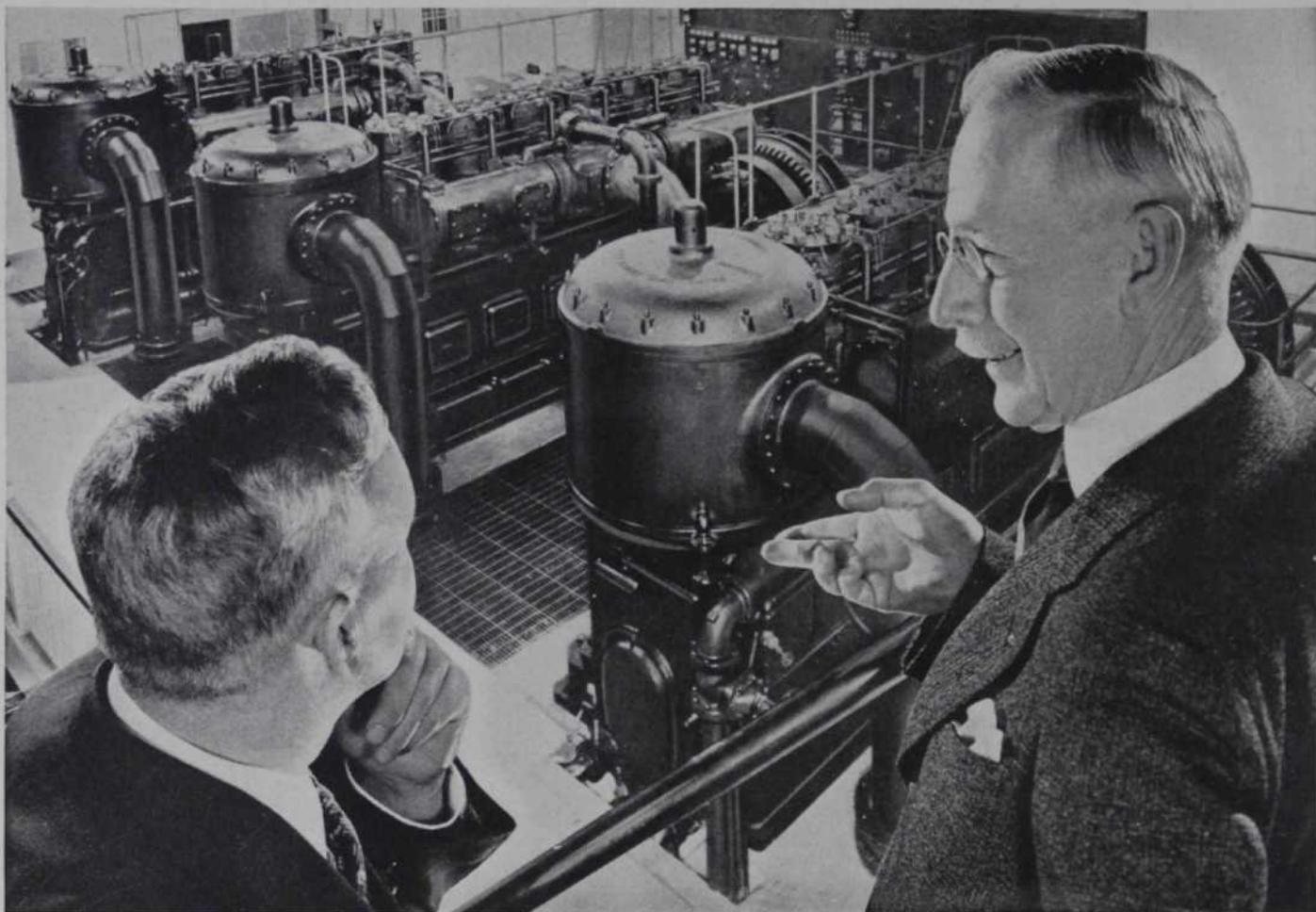
You'll see that 1941 high-priced cars resemble each other in 22 important features. And the new Plymouth is the only one of "All 3" low-priced cars with a majority of these features—more, in fact, than the "other 2" combined!

Ride this new 117-inch-wheel-base Plymouth—enjoy new High-Torque Performance with new power-gearing. You'll do less shifting! Ride Plymouth and you'll buy it! PLYMOUTH DIVISION OF CHRYSLER CORPORATION.

Look at 1941 Prices of "All 3"
Plymouth is actually lower-priced than the "other 2" on many models. And it's easy to buy! Prices subject to change without notice.

Major Bowes, C. B. S., Thurs., 9-10 P. M., E. S. T.
SEE PLYMOUTH'S COMMERCIAL CARS!





"Our Stockholders Can Thank Us for This Dividend Earner!"

"The power cost savings from this Diesel generating plant of ours would be a welcome addition to *any* firm's profits. But to our profits these savings are vital. For with our fixed material costs, fixed selling prices, and narrow profit margin, low power cost often means the difference between profit and loss.

"Now that our own Diesels generate our power, our per-unit costs no longer shoot upward when production volume is low. And, now that we're freed from power demand schedules and peak penalties, we can step up production without adversely affecting our future power rates."

• • •

Worth investigating are the possibilities of substantial savings in *your* plant through generating your own power with Diesels. But don't expect

from just *any* Diesel the 20% to 50% and greater power cost savings that hundreds of Fairbanks-Morse Diesel users are experiencing. Such savings result from using the right Diesel for the job at hand . . . from using a Diesel that is built not only for low fuel cost that closely parallels power output, but also for *low maintenance cost* under continuous, heavy-duty service.

Fairbanks-Morse, largest U. S. manufacturer of a complete line of Diesels, can tell you before you invest a penny what Diesel power could do in reducing *your* power costs. Why not find out now? Write Fairbanks, Morse & Co., Dept. B56, 600 S. Michigan Ave., Chicago, Ill. Branches and service stations throughout the United States and Canada.

7889-0A40178

FAIRBANKS-MORSE DIESELS

MOTORS
PUMPS

ELECTRICAL MACHINERY
FAIRBANKS SCALES

RAILROAD EQUIPMENT
WATER SYSTEMS

WASHERS-IRONERS
FARM EQUIPMENT

STOKERS
AIR CONDITIONERS





NOT ALL DANGER SPOTS ARE MARKED

Here, for example, are four common types of winter accidents. Just as a matter of interest, put a check mark opposite those against which you are not insured.

1 — Personal injuries to yourself, say, from falling on the ice—

2 — Your automobile skidding—causing injuries to others or their property—

3 — Smoke damage to your house and furnishings from defective heating equipment—

4 — Tradesmen slipping on ice or snow on your property and suing for damages—

• • •
What kind of insurance should you have to cover all these contingencies? Your local agent can tell you in a few minutes. His expert advice—both when you buy insurance and in the event of loss—is an important part of complete insurance protection.

Here is another money-wise insurance fact. When your policy is with a capital stock company, it is backed by both a paid-in capital and surplus. You are never liable for assessment.

Don't Guess About Insurance

**CONSULT YOUR
LOCAL AGENT
or BROKER**



The AETNA FIRE GROUP

HARTFORD, CONNECTICUT

NEW YORK • CHICAGO • SAN FRANCISCO • CHARLOTTE, N.C. • TORONTO, CAN.





THE CORRIDOR MADE GREAT MEN THEN...



George Washington



Thomas Jefferson



Henry Clay

AND IT'S MAKING GREAT MEN AGAIN TODAY!



CHEMISTS



TECHNICIANS



INDUSTRIALISTS

ONCE again from the beautiful country known today as *The Chessie Corridor* comes news of great men and great things. Sheer, gossamer threads finer than silk being made from coal, air and water...strong lightweight metals that will never rust... chemicals that cure streptococcus and pneumonia.

Washington, who first surveyed *The Chessie Corridor* as a "Route of Empire East and West"...Jefferson, who built his beloved Monticello on one of its lovely hills...Clay, who made history in its western end. All were great men...but who's to say that the far-seeing men of Industry are not doing still greater things there today?

ABUNDANT RAW MATERIALS of many kinds are near at hand and economically secured.

NATIVE-BORN WORKERS, skilled and semi-skilled are plentiful. Intelligent, cooperative men and women, 96.2% native-born.

PROXIMITY TO MAJOR MARKETS—70% of the population within first to third morning delivery range by Chesapeake and Ohio fast freight.

UNLIMITED LOW-COST POWER—abundant coal, oil, natural gas and electric developments assure economical fuel and power.

FAVORABLE CLIMATE, truly temperate, with more days of sunlight, means lower construction and operating costs—and better living.

COOPERATIVE LEGISLATION—friendly state governments foster the aims of industries they invite and of those they have.

AND A FINE PLACE TO LIVE.

Here is a region so abundantly rich in the vital needs of modern industry that many a company is talking "move." For many industries their *every need* is there...and *right next to major markets*. Yours may be one of them. To help you find out, we offer—

FACTS—for the man who makes decisions

Information on this important area is now organized and available in a new 56-page book you'll be proud to have in your library—"The Chessie Corridor—Industry's Next Great Expansion Area". This beautiful book is a graphic survey of the resources, conditions and opportunities which beckon industry to *The Corridor*. Copies will be mailed to business executives requesting them from INDUSTRIAL DEVELOPMENT SERVICE, Chesapeake and Ohio Lines, Huntington, West Virginia. Your request will be kept strictly confidential.



"Will a cute little kitten be the symbol for Industry's next great expansion area?"

THE CHESSIE CORRIDOR * Served by CHESAPEAKE and OHIO LINES

Shake Hands with Our Contributors

BUSINESS men are more than a little concerned over the influence exerted by labor leaders in the establishment of a new armaments industry in this country. They are also concerned over labor's ever-increasing activities in the political arena and the policies of its representatives who are chosen to share in the councils of government. In this issue, **Oliver Hoyem** tells why John L. Lewis embraced the opportunity to step out as the visible leader of C.I.O. and shows how other leaders are rapidly discarding a labor philosophy of independence that was handed down by Samuel Gompers.

Oliver Hoyem is vice president of Chester M. Wright & Associates, a Washington information and research organization that specializes in labor matters. His interest in labor affairs dates back to 1912 at Columbia University. He was an associate of Samuel Gompers and is generally recognized as an authoritative interpreter of what is going on within organized labor and labor's changing relationship to industry and government.

Thomas Nixon Carver, professor emeritus of Harvard, now a resident of Santa Monica, Calif., and lecturer on economics at the University of California at Los Angeles, is one of America's most widely known economists.

R. L. McCormick is a resident of Jackson Center, Ohio, a village in the county of which Sidney is the county seat. Both towns are in the same taxing and W.P.A. districts. He has spent 22 years in newspaper and public relations work.

Robert Maynard Hutchins attracted unusual attention when he was named president of the University of Chicago in 1929 at the age of 30 after several years as dean and professor of law at Yale.

Paul W. Kearney is a free lance writer well known for his articles on fire prevention.

Lui F. Hellmann is a member of the firm of Klieber & Hellmann, machine tool and special machinery builders of Indianapolis, Ind. He started work as a machinist apprentice when 14 years old and later became a tool designer for a plant manufacturing Liberty motors. He served as works manager for several manufacturers until he organized his own business.

John Perry has been a salesman, school teacher and manager of a housing project as well as an advertising man. **Alfred H. Sinks** is a former school teacher and editor, now a contributor to general magazines.

Selig Altschul is an aviation consultant and former transportation analyst for a Middle West investment organization. **Milton Van Slyck** is a former TWA official and aviation editor of a Chicago newspaper.

Contents for February 1941

	PAGE
Labor Turns toward Politics	15
By OLIVER HOYEM	
Washington—Our First Great Enterpriser	18
By T. N. CARVER	
"Recovered" but Still on Relief	21
By R. L. MCCORMICK	
The Challenge of the Market Place	25
By ROBERT M. HUTCHINS	
You Can Get It on Wheels!	27
By JOHN PERRY and ALFRED H. SINKS	
They Put a Gun on His Shoulder	30
By LUI F. HELLMANN	
Too Dangerous for Use in War!	40
By PAUL W. KEARNEY	
The Family Airplane Rounds the Corner	44
By SELIG ALTSCHUL and MILTON VAN SLYCK	
Oysters Talk—for Greenport	54
Machines Help Vegetable Markets	68
Rags for Rent!	80

The Regular Features . . .

<i>Through the Editor's Specs</i>	7
<i>National Defense—For War? For Peace?</i> By MERLE THORPE	13
<i>Leaders in the March of Business</i>	23
<i>Washington and Your Business</i>	34
<i>Man to Man in the Money Markets</i>	50
<i>Market Gleanings</i>	56
<i>The Map of the Nation's Business</i>	59
<i>No Business Can Escape Change</i>	60
<i>Memo . . . for Busy Readers</i>	70

NATION'S BUSINESS • CHAMBER OF COMMERCE OF THE U. S.
Merle Thorpe, Editor & Publisher **NUMBER 2**

Managing Editor, RAYMOND C. WILLOUGHBY; Business Manager, LAWRENCE F. HURLEY; Director of Advertising, ORSON ANGELL.

GENERAL OFFICE—Washington, U. S. Chamber Building. **BRANCH OFFICES**—New York, Graybar Bldg.; San Francisco, 333 Pine Street; Dallas, 1101 Commerce St.; Chicago, First National Bank Building; Atlanta, Chamber of Commerce Building; Canadian representative, 530 Board of Trade Building, Montreal, Quebec. As the official magazine of the Chamber of Commerce of the United States this publication carries authoritative notices and articles in regard to the activities of the Chamber; in all other respects the Chamber cannot be responsible for the contents thereof or for the opinions of writers.



THE MAN YOU HOPED YOU'D NEVER MEET



TURNS OUT TO BE A FRIEND INDEED

You'll probably feel unexpected relief if you ever have to file a claim with American Mutual and come face to face with our claim adjuster.

For the hard-boiled, brow-beating type of adjuster is passing from the insurance picture. In his place you'll find a man helpful and sincerely eager to establish the facts and justice of your claim.

The adjusters who serve our policyholders in your locality are "career" men, trained in claim investigation methods. Representing a *mutual* company, operated *for* our policyholders, these men are bound to give in good measure the coverage the policyholders buy, taking over risks and paying just claims.

On the other hand, to avoid excessive expenses for the company whose profits

are shared by policyholders, our adjusters are vigilant not to pay unjust claims or amounts greater than proper.

ONE OF THREE PROFIT OPPORTUNITIES TO EMPLOYERS

The service these men give is especially valuable to *employers*. In handling workmen's compensation cases, they also provide specialized medical services intended to restore, if possible, an injured worker's breadwinning ability. At the same time the employer receives the first of American Mutual's three profits, for the firm gets back a valued skill which might be difficult to replace.

The other two profit opportunities for American Mutual-insured employers come from tailor-built accident preven-

tion which helps to lower both accident costs and insurance rates, and from cash dividends (20% or more) which all policyholders have received for 53 years.

Investigate American Mutual for your firm's and your own liability insurance. We write practically all forms except life. Address American Mutual Liability Insurance Co., 142 Berkeley St., Dept. Q2, Boston, Mass. Branches in 60 of the country's principal cities.

This year BUY AMERICAN
MUTUAL
and get Extra profits

**TRANSPORTATION SERVICE**

as close as your
TELEPHONE

The Norfolk and Western Railway's transportation experts, located in principal cities throughout the country, are trained to assist with shipping and travel problems. They welcome the opportunity to serve you. Call on them at any time for information about rates, routes, and schedules. They have the facts at their fingertips. And you can be sure of courteous personal attention to every inquiry.

Ship and travel on the Norfolk and Western Railway. It's safe. It's sure. It's economical.

**NORFOLK and
WESTERN**
Railway
PRECISION TRANSPORTATION
COPD. 1941 N. W. RY.

Wanted!

*God give us men. The time demands Strong minds, great hearts, true faith, and willing hands;
Men whom the lust of office does not kill;
Men whom the spoils of office cannot buy;
Men who possess opinions and a will;
Men who have honor; men who will not lie;
Men who can stand before a demagogue
And damn his treacherous flatteries without winking;
Tall men, sun-crowned, who live above the fog
In public duty and in private thinking.*

—J. G. HOLLAND

Semantics to the rescue

AN ASSOCIATED Press report from London says:

The British viewpoint was that "financial aid" was an "unfortunate" choice of phraseology for what really was "economic cooperation between the British Empire and America."

Looks like another semantics job is needed, such as Stuart Chase did for the T.N.E.C. in his "First Aid for the Layman." "Spending" is a bad word, "investment" a good word, etc. "Short of war" has been stretched too far; a more elastic euphemism is needed.

After the Battle of Britain?

IT WILL be revealing if not shocking for many Americans to learn that the primary war aim of the British people is to make "social security, not profit, the motive of our life." This is the kernel of a recent statement by Ernest Bevin, Minister of Labor, member of the War Cabinet and one of the three or four most powerful men in the Empire. There is a familiar casuistry in the words.

Mr. Bevin said it was "no good thing, talking merely Gladstonian liberty." That is not what he and the British Labor Party are fighting for. Speaking of unemployment, he declared with significant emphasis: "I

Through the EDITOR'S SPECS

don't mind revolutions if they are well directed."

Even if Britain wins, it appears that democracy has caught up with old Albion—democracy of the brand which American "liberals" are calling "total" and "shattering." The British weekly, *New Statesman and Nation*, calls on Mr. Churchill to assure the masses of London that the war means "the end of the system that has condemned them to slums, poverty and war." The magazine goes on to say:

We doubt the possibility of a purely military conquest. The hope in this war—and the only hope in our view—lies in the discontent and ultimately in the revolt of submerged people everywhere. If that is to come and to work for our advantage, the sooner we make clear that we lead such a revolution the better.

Over Europe rages the plague of social revolution. How can its contagion be stopped at our own borders or our people be immunized against it? That is the question that Americans should be asking.

Peace hath its victories

IT WAS gratifying to learn last month, after several days of awkward suspense, that James Caesar Petrillo, czar of the American Federation of Musicians, had graciously given his permission for Army bands to broadcast. No understanding has yet been announced as to unfair competition by K. P.'s with the Amalgamated Order of Dishwashers but the generals are said to be hopeful that this latent difficulty can be settled without calling out the Home Guard.

The end of a quest

A WEST Coast reader discovers the fullness of perfection in Washington and sends us his verdict:

Gentleman:

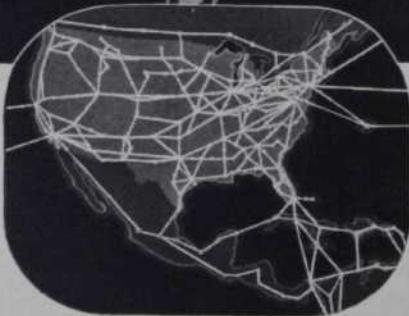
We have become thoroughly convinced that our present Government is run as near perfect as possible, and beg to discontinue Nation's Business Magazine.

Your truly,

Business in the mode

LATEST pedagogical anomaly is a professor of business administration

SAVE Weeks TO FOREIGN POINTS ...BY AIR



EVERY important city in the United States and Canada is now from 3 to 30 times "nearer" foreign markets because of the fast co-ordinated services of the nation's domestic and international airlines.

In the present rush to capture and extend foreign markets, it's now a matter of getting there first to get the business—or a matter of getting your goods there ahead of competition.

Whether you go yourself or send your men; whether you ship advance orders, samples, promotional material or other "rush" items, air service will save you weeks of valuable time that may well mean an important new customer or an old one well satisfied.

There are direct air connections from your city through the international airports to all principal points in Latin America, Canada and Alaska; to Hawaii, the Philippines and the Far East; to Australasia and to Europe.

Call your local travel agent or any Airline office for complete passenger information, fares and latest schedules; call AIR EXPRESS DIVISION, Railway Express Agency, for domestic and international air express service, rates and general information.

 **FLY**
IT PAYS TO

AIR TRANSPORT ASSOCIATION, 135 South La Salle St., Chicago, Ill.

This educational campaign is sponsored jointly by the 17 major Airlines of the United States and Canada, and Manufacturers and Suppliers to the Air Transport Industry

at Harvard who makes a speech in Boston to tell sales managers that the profit system is outmoded and sales competition a form of "civil war."

Why doesn't some corporation offer Professor C a job as sales manager? Just a laboratory job, you know. It would be a great service to let him demonstrate how business can be obtained without all this vulgar competitive selling. That would lop off some mighty burdensome costs. Also, it would in very quick order put the consumer in her place. Her place, in the Professor's City of the Sun, would be in a long queue in front of a government store.

Being a professor of business administration, he no doubt could show how an executive can "go social" and ignore all this pother about profits. Just render an unselfish service for man—that's what we mean. It's a dizzy idea and it's yours for the asking—the idea, not the professor's services.

They would cost something. That's his only concession to the profit motive.

Educate the educators first

THE suggestion has been made that a good way to discourage the radical indoctrination of students would be to grant leaves of absence to teachers and enable them to engage in business and industry during these academic interludes.

That experience would become a regular part of their training, as important as summer courses in methods and theories of pedagogy.

Most teachers live in an academic ivory tower completely isolated from the workaday world. How can they prepare boys and girls for life and for practical bread-winning vocations when they know nothing about life as most of us live it? How can they teach the facts of business when so many of them appear to consider business a gross, grubby, sordid hewing of wood?

If boards of education were to establish such a requirement we might be spared some of the nonsense voiced by the aforementioned Harvard professor. And Professor Rugg's boring-from-within textbooks ("Our Reconstructed Educational System," N. B., April, 1940) would soon be collecting dust in second hand book stalls.

A ghost haunts Mr. Wickard

SECRETARY of Agriculture Wickard notes a growing scarcity of marketable hogs presaging high prices for pork. The 1941 pig crop will be 14 per cent under 1940, which was itself a relatively low year. "Raise more

pigs" was the Secretary's appeal to farmers.

Thus is the law of compensation again recognized. Former Secretary Wallace, the modern King Herod of the pig sty, annulled it in 1933 with his order to slaughter little pigs and enforce swine birth control. Will consumers remember that "slaughter of the innocents" when they gripe about 30-cent pork chops?

"Dear Congressman"

REP. DEWEY Short of Missouri says he received a letter from a veteran complaining that the false teeth furnished him by the Veterans' Administration didn't fit. And to prove it, the indignant constituent sent along his teeth in a separate package! "He knew Missourians have to be shown," said the Congressman.

A Congressman's mail is a querulous assortment of peeves and appeals. Your letters to your representatives in Washington will be much more welcome if the temperamental edges are smoothed off a bit. To help in that smoothing, the National Chamber in its *Washington Review* has made some excellent suggestions. DO, says the *Review*:

Spell your Congressman's name correctly

Make sure whether he is a Senator or Representative

State concisely what you think, and why—the briefer the better

Subordinate your self-interest

Be sure of facts

Cite specific illustrations, whenever possible, as to effects proposed legislation would have on business and workers in your community

Write on your business stationery

Sign your name plainly. Type it under the signature

Send a letter rather than a telegram when time permits

But DON'T

Threaten political reprisals

Write in a captious or belligerent mood
Remind your Congressman of broken promises

Attempt to speak for anybody but yourself

Insert newspaper clippings or mimeographed material

Send a chain letter or postcard

Quote from form letters

Write only when you want a favor. Letters of commendation are always welcome

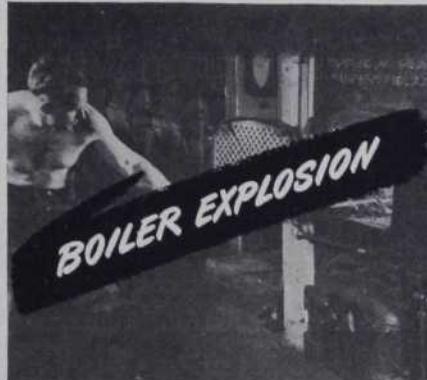
Try to make an errand boy out of your Congressman

Become a chronic letter writer

'Tis better to give . . .

SECRETARY ICKES wants to open the Virgin Islands to European refugees. While our Government itself is borrowing at home up to the limit of its credit, it arranges loans for needy foreign nations from China to Peru. Ships and planes and guns to Britain. Food supplies to Spain. Birthday greetings to Joe Stalin and holiday

Bottlenecks, too!



THERE can be no production "bottleneck" more strangling than an accident which puts an entire industrial plant out of action. And no accident can do that more completely than power equipment failure. For when power stops, *everything* stops!

Hartford Steam Boiler is devoted to power equipment insurance *solely*. Its inspection service is designed to reduce to a minimum the chance of power-plant accident in your establishment. Its home-office engineering staff, its hundreds of field inspectors and supervisors — this whole organization gives full time and energy to a job requiring precise, technical understanding of the causes and corrections of power-plant hazards.

Thus, if disaster should strike — in spite of all preventive vigilance — Hartford Steam Boiler has the extraordinary facilities needed for quick, effective aid in restoring operation. It is aid of a sort which recently led a policyholder to write: "Your intelligent, effective means of handling an emergency was a revelation to us and, one might say, almost a godsend."

From your agent or broker, learn more about the unusual things Hartford Steam Boiler can do — and is doing — for industrial concerns during these tense days when *power must not fail*. Learn also why this 75-year-old Company is by far the leading underwriter of this type of insurance . . . the company for YOU.

THE HARTFORD STEAM BOILER INSPECTION AND INSURANCE COMPANY

HARTFORD, CONNECTICUT



• Covers Boilers, Steam, Gas and Diesel Engines, Steam Turbines, Pressure Vessels, Electric Generators. . . Protects a preponderant portion of America's insured power equipment; and shop-inspects more than 90% of its industrial-power boilers during construction.



WHEN icy blizzards grip the north, somewhere it is June.

In this big country of ours—every week in the year—lettuce is ripening here, or tomatoes there, celery or cabbage somewhere else, or strawberries or avocados, oranges or apples, or the dozens of other fresh fruits and vegetables which a vitamin-conscious America demands—and gets—every day in the year.

It's one of the railroads' jobs to know just where and when each crop will ripen; to have the right kind and number of cars there to pick it up; to know just when and how cars for each crop should be iced; yes, and often heated, too, to

prevent freezing; to rush these highly perishable shipments thousands of miles cross-country and distribute them to every city and town in the land with the least possible loss by spoilage.

It's a huge job. A job that is going on somewhere every day. A job that can be done only by the closely knit, smoothly working transportation system of the American Railroads with their own steel highways, 135,000 miles of them, over which a vast traffic moves swiftly and surely in any weather.

And this staggering movement of fresh fruits and vegetables, detailed below, accounts for only two per cent of the railroads' tonnage—just two per cent of the railroads' service to America.



HOW THE RAILROADS DELIVER

The American railroads carry in a year such quantities of fresh fruits and vegetables as these:

	TONS	
Oranges and grapefruit	2,349,575	Onions 400,453
Fresh apples	887,777	Tomatoes 315,426
Bananas	880,081	Peaches 241,589
Cantaloupes and melons	208,409	Potatoes 3,193,373
Fresh grapes	457,383	Carrots 628,000
Cabbage	247,967	Miscellaneous Fresh Fruits and Vegetables 1,264,299

NOW—TRAVEL ON CREDIT. America's railroads offer new, simple installment payment plan for trips and tours. You can take your car along too. SEE YOUR LOCAL TICKET AGENT.

ASSOCIATION OF AMERICAN RAILROADS WASHINGTON, D. C.

well wishes to King Victor Emmanuel of Italy.

Headquarters for Santa Claus International, Inc., are in Washington. Applications taken the year round.

"All I know is what I read..."

FEDERAL Trade Commission orders the Ponca Drug Co. to remove "Indian" from the name of its "Highwood's Old Indian Prescription" because it contains ingredients unknown to the old Indian medicine men. Beau Brummel ties, Pontiac cars and Log Cabin syrup may wonder when their turn is coming.

Warehousing of peanuts is exempt from the hours provision of the federal law but cleaning, shelling and storing of peanuts is not, rules the Wage and Hour Division, Department of Labor.

Inspired headline writer in a St. Louis newspaper: "Presidential Vote Total Put at 51 Billion." Votes, dollars or promises?

Washington cab drivers claim 700 Government employees drive cabs in the Capital as a sideline. Many others are obtaining leave to work on nearby national defense projects, thus cutting out unemployed men, Rep. Hoffman charged.

Newark guest conductor declares performance of a W.P.A. orchestra was "disgraceful." Too much leaning on the fiddles?

From an advertisement of a New York industrial bank: "We're going to spend more this Christmas because we've found that spending the bank way is the sensible way." "Spending the bank way" is borrowing to buy Christmas gifts.

Steel gang foreman working on repairs to the Capitol at Washington had higher weekly earnings—\$267—than a member of Congress who gets only \$192. Weekly payroll averaged \$92 each for the 70 men on the job and 36 of them received more than \$100. Regular time was 30 hours a week.

"Forgotten Man" to be drafted

NO LONGER does one need to slip into a savings bank through the back door to preserve his respectability. The Treasury heads are now inclined toward financing the Government deficits more by selling bonds to individual savers and insurance companies and less through bank borrowing. For eight years thrift has been regarded officially as unsocial. Now, Mr. Morgenthau, *et al.*, find it comfort-

ing, as other expedients lose their potency, to fall back on the thrifty to meet the latest emergency.

Industry's new eye for defense

UNVEILING a new 1,000,000-volt industrial X-ray machine was one of the principal events celebrating the 40th birthday celebration of the General Electric Research laboratory.

A product of cancer research, the machine is to be used for making quick pictures of steel used in national defense. The photograph, by Pictures, Inc., shows a turbine casting being lowered through the roof for X-raying.

A picture can be made through four inches of steel with the new unit in two minutes. It required an hour to obtain a picture through this thickness with the previous record 400,000-volt unit.

The new X-ray will speed up inspection of turbines and other national defense items and is similar to units of less power which are now helping to increase the tempo in production of airplane engines.

Lament for a ravished art

HALLIE has done a book—Hallie Flanagan, one-time director of the Federal Theater Project. (N.B., Sept. 1939, Page 9.) It's a bitter book, says a sympathetic reviewer. Bitter because Hallie's brain-child, "what was to her an American cathedral of folk-art," was "murdered by a combination of shoddy politics and blind ignorance."

Is this the preliminary to an attempt to disinter and revive one of the most malodorous features of the W.P.A.? If so, we should remember what it was the economy bloc in Congress "murdered."

The project was inspired by a theory that the Government is obligated to give the unemployed work at their regular vocations. No indigent thespian, no mute, inglorious bard, no unwashed composer must be insulted with the offer of a charity job less creative than that to which he was accustomed or had aspired. The project attracted a horde of out-at-elbows Communists and other nondescript amateur actors, all averse to the rigors of leaf raking. Among its productions was a repertory of plays glorifying social upheaval and pandering to sex. Hallie stresses the Shakespeare productions but fails to comment upon such classics as "Suppressed Desires," "Love 'Em and Leave 'Em," "Companionate Maggie" and "Love on the Dole."

Some \$41,000,000 was spent on this "American renaissance" but the public's acceptance of it as measured at the box office was barely \$1,000,000.

WHAT CAN YOU DO TO HELP EMPLOYEES WHO NEED LOANS?

PRODUCTION suffers when debt worries lower the morale of a good employee. It's important to you, as well as to him, that he be able to borrow for emergencies. From the company? That's one solution to the problem of employee loans. But many companies have neither the experience nor the resources to make personal loans on a broad scale. In some plants, the employees, often with the help of a company executive, operate their own credit unions.

Why we have Small Loan Laws

But there are literally millions of workers to whom neither of these loan sources is available. These men and women must borrow elsewhere. That is the reason for the Small Loan Laws passed by most industrial states. These laws make possible the operation of the modern family finance company like Household Finance.

How workers can borrow

At Household Finance working men and women can borrow \$20 to \$300 without endorsers or bankable security. No wage assignment is taken. The simple transaction is regulated by law in the interest of the borrower. A monthly installment plan helps the borrower to repay out of income and without strain.

The table below shows some typical loans and payment plans. The borrower may choose the payment plan which best fits his own needs and income. Installments include charges at the rate of 2½% per month (less in many territories). These charges are substantially below the maximum allowed by the Small Loan Laws of most states.

WHAT BORROWER GETS

	WHAT BORROWER REPAYS MONTHLY				
	2 paymts	6 paymts	12 paymts	16 paymts	20 paymts
\$ 20	\$ 10.38	\$ 3.63	\$ 1.95		
50	25.94	9.08	4.87		
100	51.88	18.15	9.75	\$ 7.66	\$ 6.41
150	77.82	27.23	14.62	11.49	9.62
200	103.77	36.31	19.50	15.32	12.83
250	129.71	45.39	24.37	19.15	16.04
300	155.65	54.46	29.25	22.98	19.24

Above payments figured at 2½% per month and based on prompt payment are in effect in Maryland and several other states. Due to local conditions, rates elsewhere vary slightly.

We believe that families should avoid unnecessary borrowing. Better management of family funds alone can solve many money problems. Through personal contact and practical booklets on buying and budgeting, our staff of home economists strives to make consumers wiser managers and better buyers. Many schools use these Household publications as texts.

If you employ or supervise men, you are invited to send the coupon for further information. You will be under no obligation.

HOUSEHOLD FINANCE Corporation

ESTABLISHED 1878

Headquarters: 919 N. Michigan Ave., Chicago
One of America's leading family finance organizations, with 282 branches in 184 cities

HOUSEHOLD FINANCE CORPORATION, Dept. NB-2
919 N. Michigan Ave., Chicago, Ill.

Please tell me more about your loan service for wage earners—without obligation.

Name.....

Address.....

City..... State.....



EBERTHELLA TYPHOSA is the medical name of the virulent bacillus that causes typhoid fever. It thrives in lakes and rivers where careless communities dump their sewage. But scores of cities have found a powerful ally against Eberthella in the G.T.M.—Goodyear Technical Man. In these cities sewage is now treated and decontaminated by powerful chemicals stored in huge tanks lined with Plioweld on specification by the G.T.M. Plioweld is a corrosionproof rubber lining developed by Goodyear that seals metal against attack by the strongest acids. Without this protection, the equipment would be quickly destroyed by corrosion. But when lined with Plioweld it lasts

indefinitely, protecting the community's health. Plioweld is also specified by the G.T.M. for all types of industrial equipment requiring protection from chemical attack. For information write Goodyear, Akron, Ohio, or Los Angeles, California—or phone the nearest Goodyear Mechanical Rubber Goods Distributor.

Plioweld—T. M. The Goodyear Tire & Rubber Company

THE GREATEST NAME IN RUBBER
GOOD YEAR



National Defense—For War? For Peace?

CNLY Congress can declare war. Only the people can demand peace. It is a soul-searching responsibility to do the one, a glorious restraint upon emotion to do the other.

For the second time in one generation, America stands at the crossroads, torn in mind, harried in spirit, debating the thought, "Shall we declare war again on a philosophy?" There have been no warlike acts committed against our sovereignty, no insults or assaults upon our citizenry, no destruction of American lives or property. There are no Von Bernstorffs, Boy-eds, Lusitanias around which a battle-cry may swell.

Those who shout for war or, with tongue in cheek, for measures "short of war," have only one call—"We cannot live in a world if—."

If what? If the leaders of Germany are not defeated is what is usually meant.

They may be right. Many fear they may be right, but, before 131,000,000 people give up their right to peace, they have a right to proof—proof that "if" is more than if, proof so utterly convincing that men will go into battle, not half-hearted and skeptical, but inspired with patriotic zeal.

Let us, then, have an answer from our leaders. Do they indeed think that America is in danger of foreign invasion? Do they see the Luftwaffe and the Panzer divisions running over Boston, Cleveland, Memphis and Minneapolis? We cannot go to war today because bombing planes of 1960 may be able to cross the ocean in six hours. Planes can fly in more than one direction.

Do they fear that a partially victorious Germany in Europe can put a new Europe in order overnight and then invade the most powerful nation on earth, America? A generation will pass before even the Nazi police force in new Europe can take a holiday, to say nothing of when its army or its navy, still to be re-built, may look abroad.

No, there is nothing in our fears of invasion that calls for war today. On the contrary, such fears call for no war, for above all we need time to prepare for our own defense.

What, then, is our most immediate threat in case of a German victory? A threat of a trade war—the flooding of the world with serf-made products produced under a standard of living so low that America's goods will be driven from the seas, and America's tariff walls will tumble like the Belgian forts last spring.

Is the fear well-grounded? We have faced that type of competition many times before. Given the same freedoms and rewards, we can do it again.

But when has America gone to war for trade? When has war helped a nation's trade in the long run? And, even if it would help for a while, is that what our leaders urge us to meet now with death and destruction—a battle for trade? If so, let's have done with our high-sounding phrases about ways of life, liberty, the clash of philosophies by which men live.

Let us not add to the world's list of dishonest phrases which on other tongues we recognize and label as hypocrisy. Let us have candor and blunt facts from those who would disturb the people's peace.

There is both sadness and satisfaction in setting forth this expression of the point of view of American business. There is sadness because of the necessity to challenge the popular fallacy that America's wars have been fomented by business men. There is satisfaction because, come what may, business is on record that, if national disillusion comes again after another war for "democracy," as it did in the 'Twenties, it will not be for want of plain speaking by business.

Meredith Thorpe

Backed by a Record you can "get your teeth into!"

YOU don't have to guess whether you're right when the truck you choose today is a Ford. Your choice is backed by a record that has no equal in the business.

A record that shows more Ford trucks built, and more in use this minute, than any other kind.

A record that shows amazing economy reflected in the actual cost figures of Ford truck owners throughout the country.

A record in the medium-duty truck field (for comparable equipment) that shows the greatest hp per pound to total

gross vehicle weight. And extra big and extra sturdy brakes, axles, clutch, frame.

When you choose a Ford unit you get the just-right unit for your job! 42 body types. 6 wheelbases. Power choice of 30, 85, or 95 hp engines!

To make the record complete, ask your Ford Dealer to arrange an on-the-job test of Ford cost and Ford performance for *your* job with *your* driver!

If you're out to get a truck and you'd like to *know* you're right . . . why not talk business with your Ford Dealer?

FORD MOTOR COMPANY . . . BUILDERS OF FORD AND MERCURY CARS, FORD TRUCKS, COMMERCIAL CARS, STATION WAGONS AND TRANSIT BUSES



FORD TRUCKS



AND
COMMERCIAL
CARS

Labor Turns toward Politics

By OLIVER HOYEM

A REVIEW OF the strategy back of Lewis' withdrawal from C.I.O. and of A.F. of L.'s departure from the independent position Samuel Gompers insisted on

CAN WE supply speedily enough our own and Great Britain's defense needs against totalitarian aggressors, while our two major labor groups are fighting each other for power?

Sounds like a poser to stir into patriotic fervor the ire of any American business man, caught in the A.F. of L.-C.I.O. disputes, doesn't it?

Calm yourself! It is merely a rhetorical question. Just as rhetorical as to ask whether the United States can prepare itself for war under the capitalist system, or under a two-party political system.

To all three questions the answer is that Uncle Sam must take the hurdles in his long-legged stride and like it, because the hurdles are inherent in the democratic system we are trying to defend against totalitarianism.

Any attempt to tell how Uncle Sam will face the labor hurdle, especially

the failure of the Congress of Industrial Organization to merge with the American Federation of Labor, requires an interweaving of politics and capitalism. It will be in the nature of a running description, because the labor pattern is changing so rapidly.

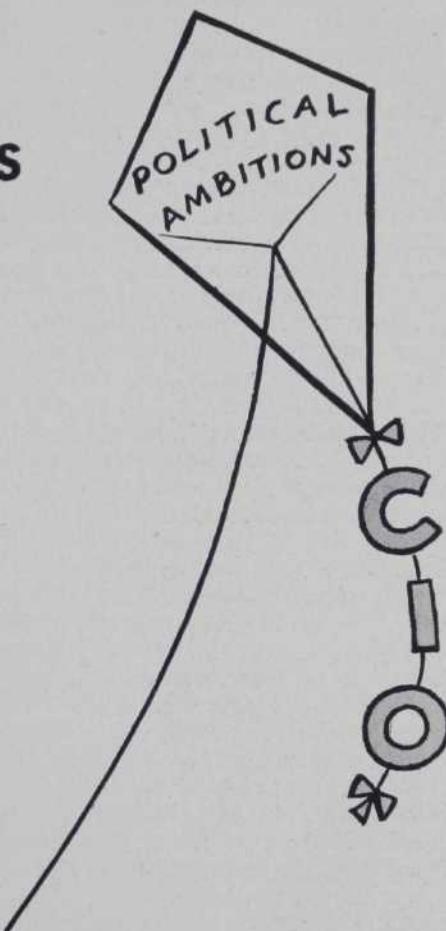
For more than a year, many government, business, labor and public leaders have insisted that everybody's welfare required an end to internecine labor war. These forces joined with the President in trying to put the A.F. of L.-C.I.O. Humpty Dumpty together again. Nothing came of it. The public came gradually to believe that John L. Lewis, President of the C.I.O., was the main stumbling block.

Hopes for peace were revived when John L. Lewis promised to resign as C.I.O. president if labor did not throw its votes to Wendell Willkie. Roosevelt won. Lewis resigned. But Lewis took care to shut the doors to peace and shove in a few wedges.

Optimists rest their hopes for peace in Philip Murray, the new C.I.O. president. Murray is not averse to making a good bargain for the C.I.O. in a labor merger. But it must be a good bargain and not a shotgun wedding directed from the White House. Murray is also loyal to Lewis. There's another rub.

Lewis has reasons of his own for keeping the C.I.O. intact. And he believes he has the votes to thwart any

Although Lewis is no longer the C.I.O. president, he dominates that organization as before



convention action to merge with the A.F. of L.

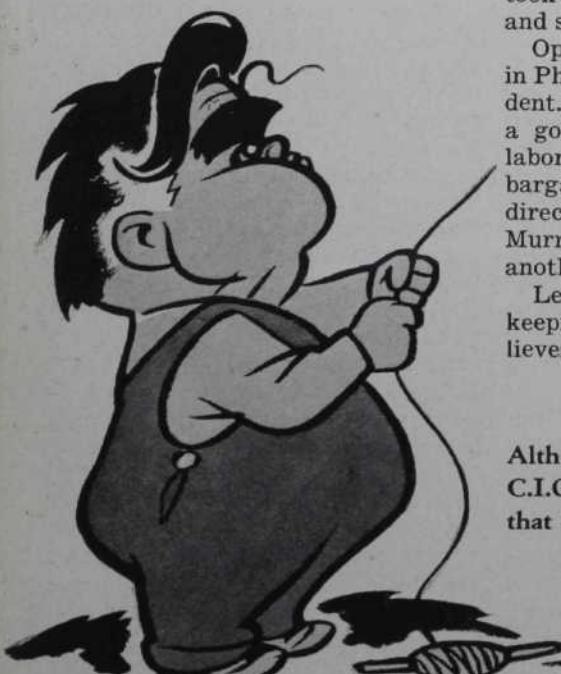
One cannot get a clear understanding of John L. Lewis and his actions in the past few years without using the yardstick of his political ambitions. He intends to make his mark in national politics.

For several years he has been stepping to the front as the champion of the unemployed, the aged and other pension groups, of youth, the Negro, the farmer and other voting groups.

Loyalty to Roosevelt was a bar to his own political ambitions; he had to break with Roosevelt to be free to move, even if he had to make politically impossible demands upon Roosevelt to force a break.

For the same reason he could not have remained loyal to Willkie. Willkie would have been a better straw man to knock down; a leader of "52,000,000 shrunken bellies" would have a better chance in 1944 against a candidate and a party that could be painted as the party of privilege.

Willkie, however, gave Lewis a chance to put across his own political platform to a nation of voters. He could hardly have said less about



Willkie and still appeared on Republican radio time. It is significant that he spoke, not as the head of the C.I.O., but as an individual claiming to be a spokesman for most of the voters in the United States with an economic status less than a capitalist.

C.I.O. looks political

LEWIS used the last C.I.O. convention as another instrument to boost his political stature. It was managed like a political convention. A carefully planned demonstration of 43 minutes—band, placards, marching, noise, and the big buttons proclaiming "Forward with Lewis and the C.I.O."—was an adaptation of the Willkie technique at Philadelphia. Because the convention committees were so obviously Lewis dominated, several members refused to serve. Ninety per cent of the resolutions were, in effect, a political party platform, giving organization backing to Lewis' past gestures toward youth, farmers, unemployed, Negroes, pension groups and labor and demanding for them a wide variety of government aid.

Because he resigned from the C.I.O. does not mean that Lewis is through. He is not. It is quite possible that he believed his future political career could be managed better if he were freed from the responsibilities placed upon him as president of the C.I.O. and the necessity of seeking favors from Roosevelt for labor. He would be especially handicapped in a war emergency situation. Lewis didn't want to be president of the C.I.O. if Roosevelt won the election. He "planned it that way."

Yet his political plan required that he continue to control the C.I.O. He would need it as his labor backlog in politics. He could not afford to have it merged with the A.F. of L. Squeezing out a few of the pro-merger groups would have constituted added insurance against a merger. He invited Hillman, Rieve and other peace proponents to leave the C.I.O. and to join the A.F. of L.; he got little pleasure out of Hillman's pledge of loyalty to the C.I.O.

Lewis' control of the C.I.O. convention was unshakable. His technique serves to illustrate how future conventions may be packed. He was not dependent upon the support of the international unions; they were actually a minority group in the voting. Even if his own United Mine Workers had joined with Murray's Steel Workers, Hillman's Clothing Workers and Dalrymple's Rubber Workers to insert a word of praise for the Roosevelt Administration, they would have lost overwhelmingly. They protested the lack of any mention of labor's phenomenal progress under Roose-

velt, but they did not attempt to challenge Lewis on the issue. Although they represented 2,176,440 C.I.O. members, a large majority, their delegate vote was only 56 out of a total of 476!

This curious situation is entirely legal under the C.I.O. constitution. The voting scheme was originally adopted on the ground that it would protect the smaller unions against unfair domination by the big internationals as in the A.F. of L. As it worked out in the last C.I.O. convention, the tail wagged the dog, and John L. Lewis had a powerful grip on the tail. For instance, ten local industrial unions with a total of 160 members controlled ten delegate votes, or just as many as the Amalgamated Clothing Workers with 259,831 dues-paying members.

As a whole, the international unions and organizing committees were outvoted by the delegates from local and state units. The internationals, representing 3,599,224 members, had 223 delegates and votes. The industrial locals, representing 23,348 members, could combine with state and local councils to muster 255 delegates and votes.

It was in local and state delegations that the Communists and other left-wingers were strongest. Whether they actually could have defeated the compromise resolution against Communists will never be known. No votes were counted on any issue. No roll-call served to reveal alignments. And on the Communist resolution, all discussion was barred by agreement. Delegates who had been charged with a "red tinge" were content to remain silent, seemed to "know the score," and were in the forefront of all demonstrations for Lewis and his policies. Lewis was their chief defender from charges of Communism. He is a believer in using "the tools at hand."

Lewis still controls

NO ONE questioned Lewis' command of enough votes to insure his reelection as president if he desired it, or the passage of any resolution he might sponsor. Lewis probably will be able to control the next C.I.O. convention from the floor as a delegate if he wishes to do so. So far, Murray has done nothing to indicate his policies will differ from Lewis' policies.

It is generally recognized that Lewis will use Labor's Non-Partisan League as one of the instrumentalities of his future political crusade. Long ago he eliminated the A.F. of L. from participation. Recently, Hillman was edged out of his share in the control. By coming out for Willkie, Lewis forced out others who were Roosevelt adherents. Now he has full control. In

spite of the fact that this political jalopy practically fell apart when Lewis tried to drive it in the Willkie parade with its brakes set for Roosevelt, it can still be repaired. How fast and far it will go between now and 1944 is a subject for argument. The war emergency will stall its progress; the aftermath will revive it.

One source of votes for a party of "52,000,000 shrunken bellies" lies in the 10,000,000 votes which it is claimed would be released if the poll tax can be removed in the South. Lewis believes this may come sooner than Democrats think. A Tennessee poll tax case is now before the Circuit Court of Appeals at Cincinnati and will go next to the Supreme Court. If the Supreme Court does not declare the poll tax unconstitutional, then Lewis plans to press for enactment of the Geyer bill declaring the poll tax unlawful in elections of President, Vice President, Senators and Representatives.

Asking aid of government

IT NOW becomes necessary to repeat what the football coaches told their reading public all last fall: If you watch only the man who runs with the ball, you'll miss ten-elevenths of the team's game.

In view of the fact that ALL labor is moving in the direction of greater political control of government, it may become of little moment in the future that Lewis is now running with the ball.

Bear in mind that the American Federation of Labor in convention at New Orleans departed farther than ever from the voluntarism of Gompers. It demanded more things of government. In more than 300 resolutions it asked that government become the benefactor of labor.

Gompers paraphrased: "The Lord giveth, the Lord taketh away." In his day organized labor was a minority group, always fearful of what the majority might do. Labor is fast losing its minority complex. There is a strong belief that its votes and influence can bring economic well-being to the worker faster by government action than by the process of getting concessions from employers through the use only of its own economic power.

Is it possible, then, that the A.F. of L. and the C.I.O. may unite behind a political program while still remaining apart as labor organizations? It all depends upon developments of the next four years, perhaps most upon developments in defense emergency production. Both A.F. of L. and C.I.O. are insistent upon increased representation on government agencies. Emphasis now is upon agencies con-

cerned with defense, but it will not end there. Labor feels that it is entitled to a share of the control of industry through government. Given that share, it promises better results than any other system can give.

In insisting upon cooperation rather than coercion, labor points to the example of England. Few people in the United States got the real significance of the dinner given by the A.F. of L. to Sir Walter Citrine, Secretary of the British Trade Union Congress, when he visited Washington.

Why was Citrine asked to repeat the address he had already given to the A.F. of L. in New Orleans? It was because the Government wanted to express as forcibly as possible its support of British labor and labor's method of cooperation in defense production in England. It was not by accident, but by deliberate planning that members of the United States Supreme Court, the President's Cabinet, and outstanding administrative agencies sat at the head table. British labor policies thus urged by implication included:

1. Labor representation on all war agencies.
2. Consultation with unions on defense matters.
3. Collective bargaining agreements made on an industry-wide basis, with the Government enforcing agreements made by majority labor and industry groups upon all employers in the industry for the purpose of stabilization.
4. Elimination of strikes through machinery provided by unions, getting away from lawyers and court regulations, em-

phasizing preference for voluntary, flexible agreements rather than coercion by law.

5. Controlling migration of workers by work cards through unions or boards on which unions are represented, a system which also keeps down bidding for skilled workers and stabilizes wage rates.

Making Ernest Bevin, Britain's labor leader, the head of England's defense production is a precedent not likely to be followed in the United States. Politics is the answer to labor's dominance in England, where workers are organized politically as well as industrially. John L. Lewis wants to follow that procedure here. There is political as well as military and industrial strategy in Roosevelt's elevation of labor to partnership with management in setting up a Knudsen-Hillman direction of the Office of Production Management.

Another implication of the Administration's cooperation with the A.F. of L. in making the Citrine dinner a success was that the New Deal is now on working terms with the A.F. of L. Is it now the turn of the C.I.O. to be the whipping boy in labor? It may be Roosevelt's method of playing one labor group against the other until both are ready to make peace or go along with the Administration's own plan for labor.

Labor and defense

MANY things will be changed if the United States becomes a belligerent early in 1941, but otherwise, as the

situation stands at this writing, there will be no A.F. of L.-C.I.O. merger in 1941. That fact may constitute a barrier to extensive labor representation on defense agencies. Yet, if Roosevelt adopts too punitive an attitude in trying to force an A.F. of L.-C.I.O. agreement, it may boomerang on him. He will not only arouse resentment from both bodies, but he will be playing right into the hand of John L. Lewis, who would not be averse to fanning resentment into political action. That's not the way to build the morale of a labor movement and unite it behind whatever objective Roosevelt has in mind.

Using as guides the history of Roosevelt and the New Deal and the precedents set up in England for getting the cooperation of labor and management in defense activities which fit the Rooseveltian purpose, it is fairly certain that, as the United States moves farther toward a status of belligerency, labor will be given plenty of opportunity to share in the councils of government. It may be that labor, either divided or united, will miss the opportunity presented. But it would be inept and stupid beyond measure if it failed to gain increased status under another Roosevelt administration. There is enough intelligence in both A.F. of L. and C.I.O. unions to realize the opportunity.

Labor troubles still stare the manufacturer in the face, especially the
(Continued on page 77)



The A.F. of L. in convention at New Orleans departed further than ever from the voluntarism of Samuel Gompers. It is fast losing its minority complex

Our domestic animals, as well as our agriculture, are inferior to yours, but this does not proceed from any defect in the stamina of either but from deficient care in providing for their support; experience having abundantly convinced that, where our pastures are well improved as the soil will admit, where a competent store of wholesome provender is laid up, and proper care used in serving it, that our horses, black cattle, sheep &c are not inferior to the best of their respective kinds, which have been imported from England. Nor is the wool of our sheep inferior to that of the common sort with you:—as a proof—after the Peace of Paris in 1783, and my return to the occupation of a farmer, I paid particular attention to my breed of sheep (of which I usually kept about seven or eight hives). By this attention, at the shearing of 1789 the fleece yielded me the average quantity of 5% of wool—a fleece of which promiscuously taken, I sent to Mr. Arthur Young, who put it, for examination, into the hands of manufacturers.—They pronounced it to be equal in quality to the best English wool.

A Washington letter on quality of livestock

CULVER

Washington—

By T. N. CARVER



BROWN BROS.



On duty with local fire department

BROWN BROS.

"SEEST THOU a man diligent in his business? He shall stand before kings."

If ever these words of Solomon applied to anyone, they applied to George Washington. In addition to his other achievements, he ran a large and successful business enterprise, and he was certainly entitled to stand, unabashed, in the presence of kings.

His fame as a soldier and statesman is so great as to obscure the fame to which he is entitled as an enterpriser. But the chief result of his soldiering and statecraft was to free American enterprise from restrictions placed upon it by the British Government, and to let loose a flood of productive energy which brought unheard of prosperity to the nation. Moreover he, a

Virginia farmer, and John Hancock, a Boston merchant, were the two leading business men of their country. They were, in that non-mechanical age, what Andrew Carnegie and Henry Ford became in a later mechanical age.

Little has been done, until recently, to acquaint us with this side of Washington's career. The picture of his home, Mt. Vernon, which most of us carry in our minds, is that of a stately mansion, with tall pillars supporting a wide balcony overlooking the Potomac. It is a picture in which we like to visualize a great man, resting from his labors, and spending the evening of his life in quiet meditation.

But he was not much given to quiet meditation. Down to his last days he

was essentially a man of action. In addition to his work as a soldier and statesman, he was an active promoter of canal building, the drainage of swamps and other vast enterprises of a quasi public nature, but his chief interest was his farm which he managed successfully and expanded to the dimensions of a big business.

The familiar picture of Mt. Vernon is really the rear of the house. The front, facing away from the river, is that of a great farmstead humming with activity. Its varied activities are indicated by the 14 other buildings which cluster around the mansion:

1. A kitchen and servants' hall.
2. A store house.
3. An ample smokehouse for the curing

Our First Great Enterpriser

DEFENDER and staunch advocate of the principles of individual enterprise, the first President put his beliefs into practice in his own business and encouraged all his countrymen to resist governmental restrictions that would hamper development of new industries or shackle production



When at Mt. Vernon he spent many hours supervising his diversified farming activities



He practiced surveying both before and after the war—helping survey first large canal in U. S.

Town office in Alexandria

- of meat.
- 4. A wash house.
- 5. A coach house.
- 6. An old brick stable.
- 7. A barn and carpenter shop.
- 8. Lodgings for white servants.
- 9. A tailor and shoemaker shop.
- 10. A carpenter shop.
- 11. A spinning house.
- 12. A blacksmith shop.
- 13. A house for families.
- 14. A hot house.

In addition, there were on the estate, a flour mill, a wharf and fish house, a distillery, and a schooner.

Washington was too practical minded and too energetic to overlook anything that would add to the productivity of his estate. The catching and curing of fish, both for consumption on the estate which had to feed more than 100 persons, and for sale, was a part of his business.

An excellent brand of flour with a

wide reputation was ground at the Washington mill. Some of it was shipped to London, some to the West Indies, some was hauled in his own schooner and sold in Alexandria and points on the Chesapeake, and some was baked in his own bakery into biscuits which were sold to ship masters.

When he inherited Mt. Vernon it included about 2,700 acres. He proceeded to buy all that joined him until it increased to 9,000 acres. He not only farmed successfully on a large scale, but he experimented largely, broke away from the one-crop system, and became a trail blazer in other ways.

He inherited not only the nucleus of his estate, but, along with it, the one-crop system which then prevailed in Virginia. Tobacco was at first the money crop, most of which was shipped to London. Consumers' goods that could not be produced on the farm were largely imported from London. The Virginia farmers had to pay the freight both ways. Besides, the navigation acts and other oppressive laws interfered with the free play of American enterprise.

Washington may not have been the first to see the wastefulness of this system, but he was one of the first to break away from it. About 1762 he began growing wheat on a large scale to grind in his own mill. By 1792, his wheat crop had increased to 5,000 bushels.

Being an experimentalist, he tried a number of experiments that did not "pan out." If these prove that he was not a successful farmer, then Edison was not a successful inventor, or Burbank a successful plant breeder. Both tried thousands of experiments that proved nothing except that they wouldn't work.

Learned from experience

THESE great experimentalists, however, were wise enough to learn from their own experience and that of others. They did not try the same experiment over and over after it had proved to be impracticable. Neither did George Washington. In this respect they all differed from some of our modern political experimentalists, who boast that they are willing to try anything once! So is a monkey, or a fool! Wise men can learn from the experience of others. They know that certain projects have been tried before, have failed, and do not need to be tried again.

Washington's main interest seems to have shifted in his later years from wheat to livestock, as it had earlier from tobacco to wheat. Always a superb horseman and a lover of horses, he first turned to that branch of animal husbandry. At one time he kept as many as three stallions and advertised them in the Virginia papers, besides

raising many colts on his own farm. On one occasion, in the course of the War for Independence, he bought from the army 24 mares which, through injury or otherwise, were no longer fit for army use and had them sent to Mount Vernon to raise colts. The price he paid is not mentioned, but he probably got them at a bargain because he was known to be a canny horse trader.

One of his most interesting and least known enterprises was that of improving the mules of the South. One who knows the part the mule has played in the South's agricultural economy will understand the significance of that experiment. He early concluded that the mule was the ideal draft animal, or power plant, for the southern farmer. A few had been bred, but they were poor specimens, being from poor stock on both sides of the family tree.

Superior Jacks were hard to get because the countries where they were produced forbade their exportation. But Lafayette and the King of Spain, learning of his interest, each sent him a Jack and two Jennies of the finest breeds of Southern Europe. These became the progenitors of all good American mules. Thus Washington became the founder of the mule industry in the country which he fathered.

This brief account of the operations at Mount Vernon is enough to show that

(Continued on page 82)



Washington made an early visit to the site of the first cotton mill established in New England. He was intensely interested in new industries and encouraged productive adventuring



A view of Sidney, Ohio, hailed in February, 1940, as the "City with Perfect Recovery"

"Recovered" but Still on Relief

By R. L. McCORMICK

WELL, our town didn't go off W.P.A., after all.

It now has been living in a state of "perfect recovery" for one full year.

It is about the busiest small city in the United States, with its 20 industries hiring 1,000 more men and women than they did 12 months ago when 97 per cent of its approximate 5,000 employables were reported working.

Its merchants are prospering as seldom before, with many of them happily reporting a "Christmas business every Saturday."

Its theaters and cafes are thronged; its council men are considering the enactment of traffic regulations formerly found necessary only in much larger centers.

Yet, W.P.A. lingers on in Sidney, Ohio. (Pop. 10,000.)

Remember the place?

Certainly! It's the little industrial city that burst into the national spotlight in February, 1940, as the "only case of perfect recovery," on the basis of a survey made by a Washington columnist, Raymond Clapper, whose findings subsequently were confirmed by other analysts.



A shopping crowd in Sidney where merchants "do a Christmas business every Saturday"

It's likewise the community that was scheduled to go off W.P.A. by May 1, 1940—and didn't.

For a time, it even threatened to become an issue in the presidential campaign—from the federal spending angle. That, too, failed to materialize.

Maybe some red-hot political oratory would have solved the "problem" facing us in Sidney and surrounding Shelby County. On the other hand, it may be

better to approach the question from a calmer, less prejudiced, strictly economic viewpoint, as now can be done for the first time.

So, what to do about it? What must Shelby County finally do to be able to exist without benefit of federal subsidy? How are we at long last to live up to our reputation of being "perfectly recovered"? How, for that matter, will any community manage to rid itself of W.P.A. and other forms of government relief?

We thought we knew the answers to those questions. But current figures from the W.P.A. sub-office assure us we weren't as clever as we had supposed.

As of December 1, approximately 225 of our citizens still were drawing W.P.A. checks regularly. This, to be sure, is a large decline from the high of nearly 3,000 recorded earlier in the depression.

But the number isn't much smaller than the 350 total registered at the beginning of our era of "perfect recovery." And it may increase as winter wears on.

Ten months ago, the "350" figure looked most insignificant. Newspapers

and magazines were giving us a great play on our "perfection." Scarcely a day passed without some new visiting writer dropping in on us to study and appraise the causes of our good fortune.

Working for a zero score

THAT made us feel mighty good. Our civic pride knew practically no limit, finally swelling to the point at which some of us conceived the idea of erasing that "350" and chalking up a perfect zero score in respect to unemployment.

The optimists believed that the feat could be accomplished by May 1. Construction and agricultural work, beginning to open up, should easily absorb the few remaining idle. The task appeared simple—so simple, in truth, that the local manager of the Ohio Employment Service was even quoted as saying our goal was possible.

A New York newspaper picked up the story and headlined it: "No W.P.A. In Ohio City After May 1."

Anticipated normal processes would turn the trick, we felt sure. But just to clinch matters, we launched a "City Beautification" campaign to make still other jobs for the unemployed. Progress was carefully checked over a period of several weeks.

Then, May 1 arrived.

Final report: 335 still on W.P.A., a reduction of only 15.

Yet, other figures just as authentic had been telling us that even more than 350 men and women had been put to work. One factory, alone, had added 200

to its pay roll. Something was wrong, somewhere, and we were beginning to have "ideas" on the subject.

First, though, let's thicken the plot, as it were, by telling what the "Defense Boom" did to us.

It struck Sidney and Shelby County a bit earlier than other sections because of the presence here of two large machine tool plants which make the equipment by means of which other industries turn out the finished products for preparedness.

The boom gained substantial momentum in Sidney as early as last spring. By June, one of the machine tool factories had built its second large addition and now is employing nearly 400 more workers than it did a year ago.

At least eight other Sidney companies have shared in the upswing through receipt of various types of sub-contracts. They, also, have enlarged their pay rolls.

In all, there probably are 1,000 new employees in our industries as a result of national defense activity. The estimate is conservative.

One thousand more jobs on top of "perfect recovery!"

Theoretically that is enough to wipe out a W.P.A. list nearly three times as large as that of Sidney. Actually it required nearly ten jobs in private industry to get one worker off federal relief in Sidney and Shelby County.

We are pretty well agreed today that that coveted zero unemployment score is beyond our reach.

Now—about those "ideas" we acquired regarding the causes of our current, and perhaps permanent, position of futility. We have had time to think them over since they first occurred to us in the wake of failure to kiss federal relief goodbye and think we can present them more rationally—and fairly—now than then.

We have come to believe that the blame, if such it may be termed, can be divided three ways, with nearly equal shares going to:

1. The "system" under which federal aid is administered.

2. Those who receive relief through W.P.A. and other agencies.

3. Our county and municipal officials—and ourselves, as taxpayers.

The Government, we are convinced, is to be censured for its careless, hit-or-miss broadening of the relief base that has admitted many who were not actually needy to receipt of public money—persons who had been self-supporting under previous interpretation of the word.

Easier than earning a living

COUNTIES like Shelby and cities like Sidney are small units of population and we are able to keep pretty close check on our neighbors—good and bad. Thus we know beyond doubt, argument or political contradiction that men who formerly made a satisfactory livelihood doing odd jobs, working on farms or even operating farms have become W.P.A. clients, not from necessity, but simply to take advantage of easier jobs at wages slightly better than they had been receiving.

We know, also, of elderly men who had "retired" in possession of savings, or who had been provided homes by children or other relatives, who now have resumed activity and are receiving aid.

And we are familiar with the cases of young men from the farms and villages of the county who have taken temporary jobs in our city factories to acquire extra spending money in their spare time and who have quit their jobs, reg-

(Continued on page 48)



Federal money built the high school stadium and the municipal building. "If we don't take the money someone else will"

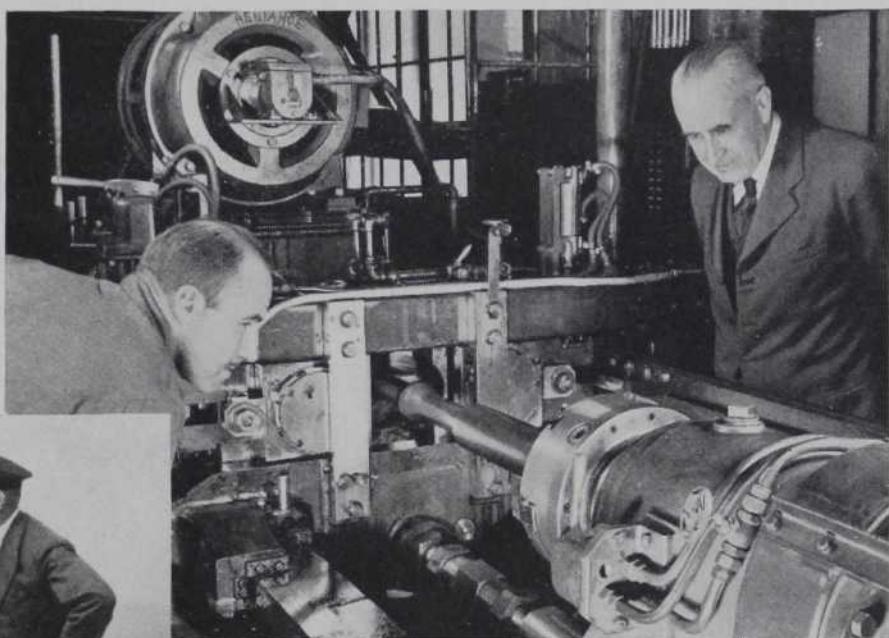




Major Kadlec (left) and E. J. Hunt

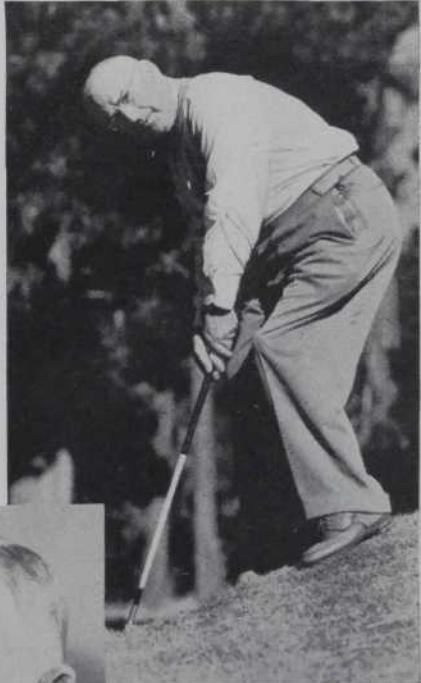


Leaders in the March of Business



Clarence L. Dewey (right) and son, Sydney

S. H. Logan (left)
C. A. Criqui
Addison F. Vars



Arthur J. Morris



I. W. Wilson

E. J. HUNT, 49, is operating manager of the \$20,000,000 army tank arsenal under construction for Chrysler Corporation. It is expected that the new factory will begin to turn out medium (25 ton) tanks at the rate of five per day per shift before the year is over. Mr. Hunt has been associated with Maxwell and Chrysler since 1912 and has worked in practically every machine and production department.

CLARENCE L. DEWEY and son, Sydney, of the Steel and Tubes Division of Republic Steel Corporation, have developed a new machine which automatically shapes tubular products. The 65-foot long machine is now working exclusively on airplane parts, but the new process will have an important bearing on future production of tubular furniture, lamps, automotive parts, tools and musical instruments.

ADDISON F. VARS, known chiefly to business men as head of his own advertising agency, was recently elected president of the Sterling Engine Company, an organization founded by his father 40 years ago in Buffalo. Mr. Vars switched his major activity to Sterling in 1939 when he became executive vice president. At present his company is engaged in quantity production of marine engines for small, fast defense craft in the U. S. and British navies.

ARTHUR J. MORRIS, founder of the Morris Plan System and president of the Morris Plan Bank of New York, reported at his bank's twenty-fifth anniversary that 1940 business had reached an all time high. The bank's original capital in 1915 was \$100,000, deposits totaled \$47,000 and loans, \$851,000. At the close of 1940 deposits exceeded \$28,000,000, loan volume was more than \$42,000,000, capital was \$2,000,000 with surplus of \$1,600,000 and undivided profits of \$271,754.

I. W. WILSON, vice president in charge of operations of the Aluminum Company of America, whose company is investing more than \$150,000,000 in its speeded-up expansion program in the interest of national defense. Ordinarily such a program would be extended over 20 years. The new schedule calls for doubling in three years, a production built up over half a century. Price of ingots is now 17 cents a pound in comparison to 20 cents in January, 1940.



Louis Fancher

To the forces of brutality we must oppose the power of righteousness, order and knowledge. Upon the triumph of that power the survival of our civilization depends

The Challenge of the Market Place

By ROBERT M. HUTCHINS

MANY BUSINESS men will get a new view of education and its relation to business from this article by the President of Chicago University

BUSINESS is one human activity for which the higher learning can do little directly. Not that business is too unimportant to deserve the attention of a university. On the contrary, it is too important to play with and, when it comes to training business men as such, all a university can do is to play at it.

A university can study business. It cannot produce business men. It can promote understanding. It cannot train practitioners. The way to learn how to practice anything is to practice it under the conditions under which you will have to practice it in life. The way to learn to understand anything is to grasp its theory and its principles. The place to do this is in a university. The last chance most people have to grasp the theory and principles of what they are doing is during their education. They have plenty of time to learn the practice when they finish their education and start to work at their jobs. To the extent to which business schools sacrifice principles to practice they sacrifice the only thing they can do well to the attempt to do something they cannot do at all.

An educated person knows what he is doing and why. A person who grasps the theory and principles of what he is doing knows what he is doing and why. Such a person should be more successful in business than one who has acquired techniques but no understanding.

I venture the guess that the most practical education is the most theoretical one. It may not look practical, because it does not include the routines of a vocation. It is practical, because it is the only kind of education that educational institutions can practically offer, because it lies at the basis of any outstanding practical success, and because it provides an intelligible and workable division between what a man should earn in college and what he should earn in practice.

We are used to the notion that uni-

versity research is not immediately practical. The work that Prof. Robert Millikan did at Chicago, long before the radio, was vital to its development. But if the test of immediate utility had been applied to it the University would never have financed it. At that time nobody could have imagined that it would make any contribution to the radio. Nobody could have imagined indeed that there ever would be such a thing as the radio.

The sensational advances in engineering and medicine that we hear of every day rest on years of impractical theorizing and experimenting by physical and biological scientists. We know this. Perhaps we know it too well. Our generation is filled with awe at the wonders of science, which has, among other things, given us instruments through which Hitler can address the world, destroy peaceful states, and even, we are told, get to South America before you can say "knife."

We favor the scientific

WE are so impressed with science that, if we are only told that something is scientific, we are for it. If something is not scientific, we are against it. The more remote and incomprehensible scientific work is, the better we like it. Though this attitude is exaggerated, it is essentially sound, because we are right in thinking that science cannot advance if we look for immediate practical results. We must think of science and not of its applications if we want science to flourish.

So it is with education. We must think of education and not of its applications if we want education to flourish. If we produce educated men and women, they will take care of the applications themselves. If we can teach people to use their heads, they will use them in business and they will, we hope, be better business men because they do.

This is all that a college or university can do for its students: it can try to

give them some help in learning how to think. Now, as Julius Caesar used to say, this is dangerous business. If universities are dangerous it is because thinking is dangerous. Thinking may make you dissatisfied with your environment. It may make you want to do something about the conditions under which our people live.

If what this country wants is a dead level of mediocrity, a nation of identical twins, without initiative, intelligence, or ideas, it should abolish the universities. By trying to make their students think, the universities make it clear that they do not want to turn them into so many imitative automatons. By helping them learn to think they tend to make them resistant to pressure, to propaganda, or even to reward. They tend to make them individuals, and individuals on a strictly American plan, asking no quarter for themselves but alive to the needs of their fellow-men.

The American system is one that offers great incentives to initiative. It is based on the notion of individual enterprise. The path to leadership is open to anybody, no matter how humble his beginnings. The most striking paradox of American life is that this system, which must rest on individual differences, produces the most intense pressure toward uniformity. The fact that any boy can become President, instead of making every boy an individual, tends to make him a replica of everybody else.

"Getting on" is the great American aspiration. Now the way to get on, we are apt to think, is to be safe, to be sound, to be agreeable, or at least inoffensive, and to have no views not sanctioned by the majority, by your superiors, or by your group. We are convinced that, by knowing the right people, wearing the right clothes, saying the right things, and thinking the right thoughts we shall all get on. We shall all get on to some motion picture paradise, surrounded by fine cars, refreshing drinks, and admiring ladies.

So persuasive is this picture that we find politicians during campaigns making every effort to avoid saying anything; we find important people condoning fraud and corruption in high places because it would be upsetting to attack it; and we find, I fear, that university presidents limit their public utterances to platitudes. Timidity thus engendered turns into habit, and the

stuffed shirt becomes one of the characteristic figures of our age.

In this atmosphere the universities may, in one sense, be justly accused of deliberately unfitting their students for life. Their graduates may not "get on," not because their education is impractical, but because they are not interested in getting on. They may have learned to distinguish between means and ends. Universities are subversive in the same sense in which the church is subversive. They try to subvert ignorance, prejudice, injustice, conformity, self-satisfaction, mediocrity, and stupidity. They stand for wisdom and goodness, and wisdom and goodness, though popular words, are not univer-

sally popular practices. The confusion of our time is the confusion of means and ends. Art, religion, and education, by which I mean intellectual development, are ends and not means. We want them for their own sake and not to serve other purposes. Wealth and power are means and not ends. We want them because they help us achieve art, religion, education; moral, intellectual, aesthetic, and spiritual goods are the end of life. The grand example of the reversal of means and ends we see now in certain foreign countries, where everything, and notably art, religion and education, is sacrificed to the acquisition of power.

What is the power for? One can only

answer that it is an end in itself. But if power is an end in itself then we are no better than the brutes who live by brute strength. If art, religion, and education are degraded to instrumentalities of power, then the very reason for the existence of our species is blotted out and our lives are deprived of meaning. Neither wealth nor power has any meaning as an end in itself. They have value only as means to moral, intellectual, aesthetic, and spiritual ends.

In this country, as I have suggested, we are committed to freedom, truth, and justice, but we have imperfectly understood them and may have difficulty in defending what we imperfectly understand. To the forces of brutality, chaos, and ignorance we must oppose the power of righteousness, order, and knowledge. Upon the triumph of that power the survival of our civilization depends.

Education and freedom

ALL the modern dictators have shown that they cannot tolerate education that exemplifies the good life, a life directed to knowing the truth and doing justice, a life directed to moral, intellectual, aesthetic, and spiritual ends. Such a life is impossible without freedom of action and freedom of thought. Freedom, truth, and justice would be fatal to the totalitarian state. They are the aspirations and the purpose of democracy.

Civilization, it would seem, must find a refuge in America. The abolition, except as training schools, of the universities of totalitarian states; the tendency of recent educational pronouncements in France; the dispersion and bombing of universities in England mean that almost nowhere in the world, except in this country, can the standard of freedom, truth, and justice be raised. Even if we enter the war, we can, in a modest way, keep the flag of civilization flying, for our geographical situation will preserve our universities from the fate of those of Great Britain. The American universities are the last resource of a world plunging to destruction.

A university, then, cannot train its graduates to be "successful." They may not even want to succeed in the conventional sense of that term. Nor can a university hope that all its teachers and all its graduates will meet with the instant and continuous applause of their fellow-citizens. A university must submit the society in which it

(Continued on page 49)



Freedom, truth and justice would be fatal to the totalitarian state. They are the aspirations and the purpose of democracy

You Can Get It on Wheels!

By JOHN PERRY and ALFRED H. SINKS

AMERICAN ingenuity seems able to devise a way to put most any activity on wheels. Even cavalry horses now go to battle via the gasoline route

OUR COUNTERMAN stared toward the highway behind us. "Here comes the office!" he yelled.

The kitchen door swung back and the manager appeared. With his ledgers tucked under one arm and the other hand clutching a sheaf of loose papers, he hurried out of the big, roadside restaurant.

We swung around on our stools and watched him step down into the broad parking space outside.

Into that space a blue coupe was backing a big, blue-and-white trailer coach. The trailer bore the same insignia as the restaurant, and in one



The executive in his mobile office keeps in constant touch with all branch units



Despite dire prophecies there are more house trailers than ever—something like 350,000 on the road

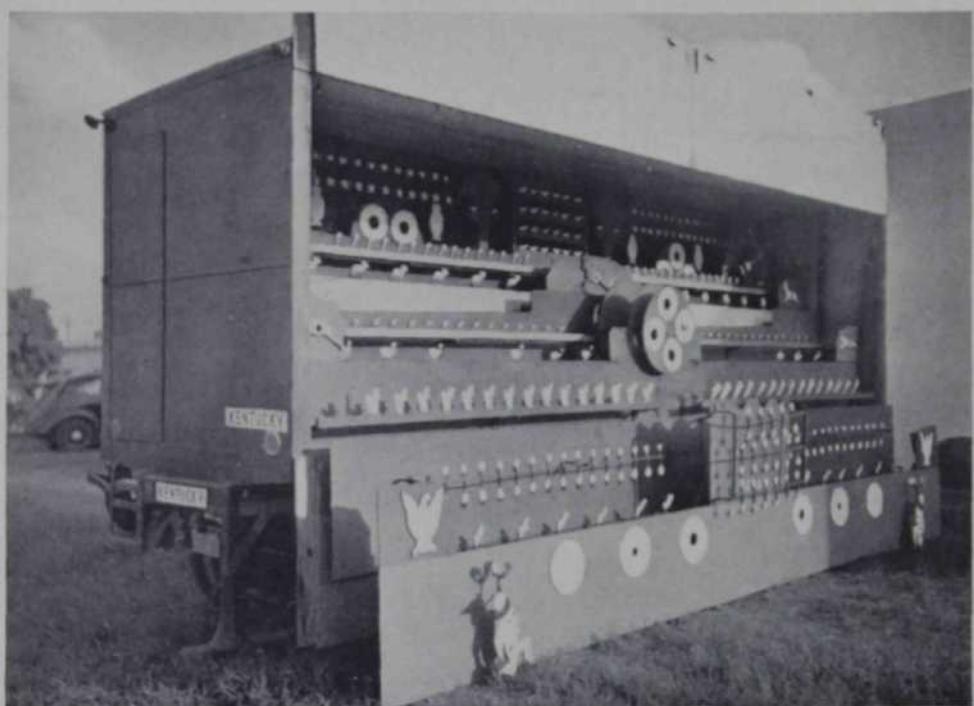
corner the words:
"Mobile Office."

The driver backed in expertly and stopped. The trailer door opened and a girl stepped down. She took the manager's ledgers and papers, and they both disappeared inside.

"Some gadget!" The counterman grinned. "That thing does just about everything but talk."

We finished our coffee and went out to have a look. We knocked and entered the trailer. The girl sat at a regulation typewriter desk, a telephone at her side. Her little office might have been on the fortieth floor of the newest Manhattan skyscraper. A small bookkeeping machine on a table at one side faced a comfortable, leather upholstered couch on the other. There were a couple of filing cases and a storage cabinet.

As we sat down, the driver stuck his head in.



This traveling shooting gallery was built for an enterprising concessionaire, who folds up the side wings and moves it wherever and whenever he pleases



Father Terminiello uses this coach for work conducted by the Rural Life Bureau of the Diocese of Mobile. Forward compartment has complete living quarters; back lets down for a platform

"Telephone's connected," he announced.

"I'll let you talk to Mr. Strong, our general manager, just as soon as he's finished with the restaurant manager," the girl told us. The ring of the telephone cut in on her. She answered and switched the call to the inner office.

"That was the home office," she remarked casually. She went on talking as she checked over the ledgers, totalled the receipts on her bookkeeping machine. "Oh yes, I like this kind of work. It does seem a little odd, though, doesn't it?" Yes, this was the most

pleasant job she had ever had. Travelling did break the monotony of office work. And there were never any impatient queues of people drumming their heels as they waited to see the boss. The boss came to see them.

Yes, it was a new idea. Until a year ago, the home office had never found a satisfactory way of checking on its 15 restaurants, scattered over four states. It meant keeping 15 different

sets of books, floods of mail, endless telephone calls, frequent audits. Restaurant managers were harassed and overworked.

Now the "office" visited each restaurant every two weeks. Local managers need only keep simple ledgers and save their bills and receipts. Five days a week were spent in making the rounds. Saturdays were spent at the home office.

A versatile business aid

THE manager came out as we were talking. He showed us the special features he had put in: a water cooler and refrigerator, an air conditioning system, a lavatory, and built-in racks where menus, charts, advertising matter and other paraphernalia could be kept on hand.

"It's the coming thing," he assured us. "And now if you'll excuse me, we'll have to be rolling. We've got 200 miles to cover today."

That's the trailer coach for you. A versatile creature! Every time you think you've got him pigeonholed and filed away under "F" for Fad, he upsets your calculations by rolling up in a new disguise. Hook him on to a power cable and he becomes a substation. Tap a telegraph line and he becomes a rural telegraph office. Add a few test tubes, a tank of gas and a Bunsen burner and you have a travelling laboratory.

Swollen tonsils are swabbed in medical trailers and aching teeth pulled in dental ones, while the proprietor of the crossroads store stocks up from the new models displayed in a travelling showroom coupled to the rear of a salesman's automobile.



Interior of a merchandising trailer used for selling household appliances

SMITH BROTHERS



U. S. ARMY SIGNAL CORPS
The operating room of U. S. Army's complete mobile surgical unit

For at least five years, "experts" have been writing the obituary of the automobile trailer. But the trailer doesn't seem to care. There was a time when the trailer was hailed as the sesame that was going to cure the depression, put America to work, put America on wheels! The whole, bloom-in' population was going to escape taxes, mortgages and unemployment, and go gypsying in trailers. As a profitable investment the trailer was going to beat the automobile, the radio, and the Oklahoma oil strike rolled into one.

Defeated dire prophecies

THAT dream faded as the clamor grew loud from town councils and chambers of commerce. Trailers were a menace to public health and morals! Trailerites sent their children to local schools but paid no local taxes! If people took to living in trailers, what was to become of our institutions? There were shudder-provoking pictures of a coming generation that would reject all responsibility and just go tearing up and down the land.

State legislatures and municipal councils passed laws calculated to drive the trailer over the hill to the boneyard. Trailer production failed to soar to boom proportions. Trailer prosperity was a snare and an hallucination.

"In five years you won't see a trailer anywhere," was the new tune.

But the trailer, having betrayed its most enthusiastic friends, proceeded next to fool its critics. The trailer put

aside the follies of its youth and got down to business.

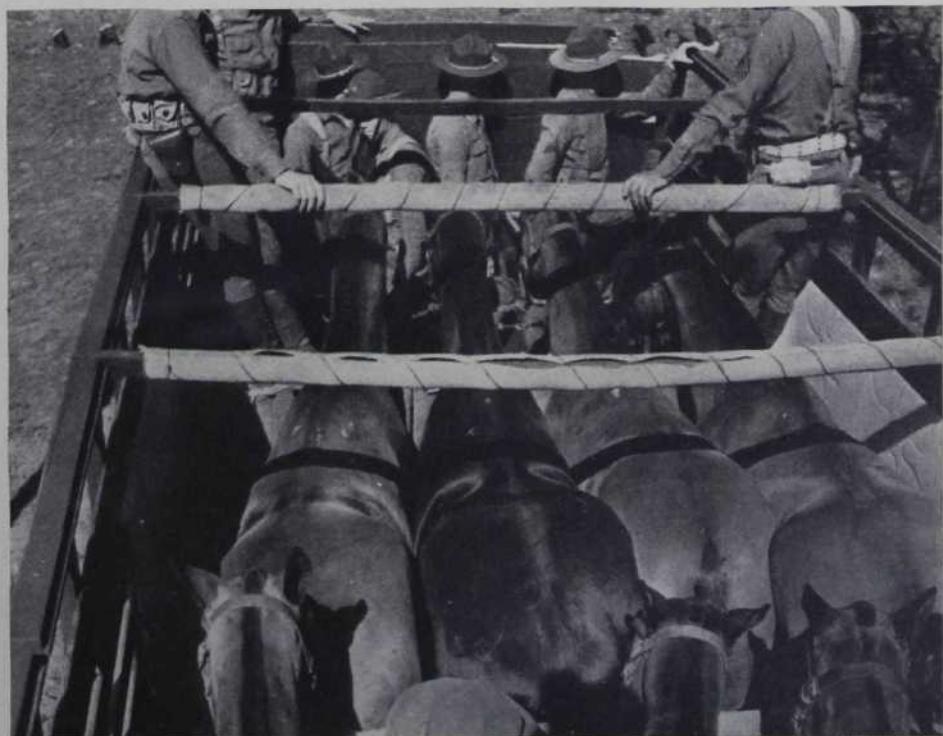
Today trailer coaches are providing public service in a score of ways. They are a growing factor in a number of kinds of business. They have found a definite place in exploration and in scientific research. In sports and in the entertainment industry, trailers are either shouldering out

some older method of transport or have created their own unique function. Police are using them. Highway departments are experimenting with them. Modern methods of warfare suggest many places where trailers add to the speed and efficiency of national defense. Today the Army and Navy are among the largest purchasers of trailers—two of the largest trailer coach companies are using their entire plant

(Continued on page 74)



SMITH BROTHERS
Detroit public library's "Bookmobile" for making more books available to more people is only one of many similar traveling libraries



U. S. ARMY SIGNAL CORPS
Several U. S. Army cavalry regiments are equipped with trailers to carry their horses, men and equipment to the danger point in quickest time



They Put a Gun on His Shoulder

By LUI F. HELLMANN

A REVIEW of some World War mistakes which must not be repeated if industry is to do its full part in our defense program

BACK IN 1917 and '18, when the United States was involved in war, we permitted our hysteria to overcome our better judgment and did many foolish things. Why shouldn't we think of those things today as, again preparing for defense, we begin to conscript men?

One of the greatest mistakes we made then was to assume that our actual fighting forces were the most essential activities of the war. We ignored the fact that modern wars are won or lost by industry. If any one doubts this assertion, a look at the

European map today should convince him. Every foot of land that has changed hands in the present conflict was taken by industrial preparation. Always the victorious force was adequately equipped while the losing side was not.

Today, as we conscript our man power, we should use the utmost caution to determine a man's true qualifications. Then we should carefully decide whether he is more valuable to us in the army or in industry.

Our mechanical industries will, naturally, bear the brunt of this war preparation, although nearly every industry will have some active part in it. Robbing any of these industries of trained technicians or skilled men will be one of the saddest mistakes we can make.

I believe that I can explain this best by citing the true stories of what happened to two skilled workmen in the last war. I am using fictitious names

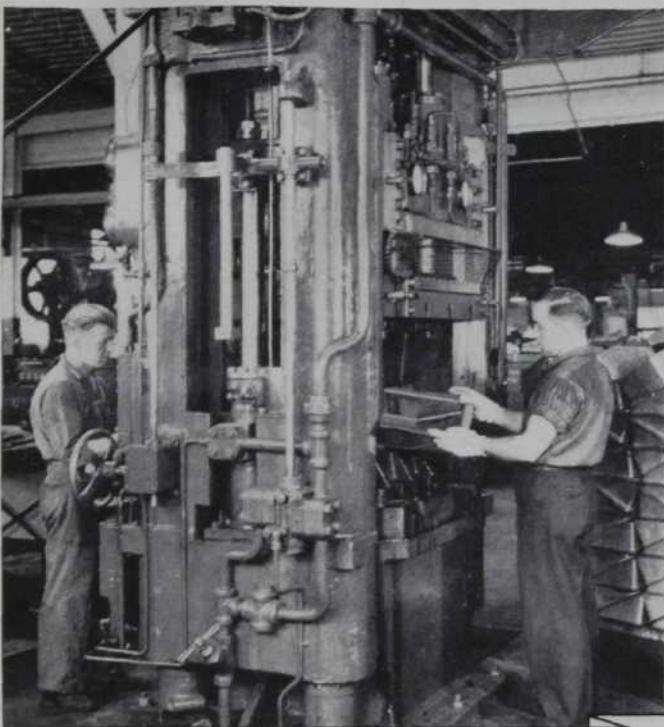
for these men as I do not desire to embarrass them.

We will call our first man John Jones.

In his earlier days John had gone into the machine shops as an apprentice boy. He became a very good, practical machinist. He was one of those ambitious fellows who are not satisfied to be proficient at one trade. In his spare time he studied mechanical drawing. He became adept at it even before the war broke out in 1914.

When he was in a position to earn a respectable living, he looked around, found what he then thought was the right girl and they were married. When he was called up in the draft of 1917, he was exempted on the grounds of dependency.

Early in the summer of 1917, after the United States entered the war, there was a wild rush to erect and man the ammunition, gun, plane, ship and other wartime factories. It was



MACHINERY OF PRODUCTION



MACHINERY OF CONTROL

VITAL TO THE NATION'S EXPANDING PRODUCTION

FIGURES OF CONTROL

Estimates, specifications, commitments, budgets—even before production starts.

Pay checks, earnings records, and other labor accounting essential to employment.

Control records to regulate the flow of materials and parts to the scheduled rate of output.

Management figures upon which to base quick and sound decisions affecting orders, stock, production and shipments.

Back of men, money and materials in an expanding production program—back of busy ship lanes and crowded rails—are the vital figure-facts that enable busy executives to make quick and sound decisions affecting orders, materials, production and shipments.

For many years Burroughs has supplied industry with machinery of control—machines that furnish information and reports while they are news, not history.

Now—when there is less time in which to achieve maximum production—today's Burroughs machines provide the required records and figure controls in less time, with less effort, and at less cost.

BURROUGHS ADDING MACHINE COMPANY • DETROIT, MICH.

Today's Burroughs

DOES THE WORK IN LESS TIME—WITH LESS EFFORT—AT LESS COST

much like the rush with which we are starting our defense program today. John quickly landed a job as a tool designer in a factory which had a large Liberty Motor contract.

Before the World War, the term of "tool designer" was almost unknown. Good men of this classification were rare then and none too numerous today.

Plan for speedy production

BEFORE a motor, plane or any other mechanical device is started in construction, an engineer plans it and draftsmen make drawings of every detail part. These men are known as the "engineering draftsmen." But the mere fact that the drawings have been made and that machine tools, such as lathes, drill presses, milling machines, planers and so forth, are available does not mean that these parts or completed units can be built in quantities with the speed required or at a reasonable cost. It simply means that one or more individual and really experimental units can be built at an enormous cost. By such methods we could not produce one-tenth of our requirements.

Before there can be efficient production, the "tool designer" must enter the picture.

This tool designer takes one of the

parts and the drawing for it. He studies and analyzes the part carefully. He divides it into a series of correlated machining operations by which it can be machined quickly, easily and efficiently.

The tool designer is a particularly trained type of man. To be truly successful in this profession he must have spent years in the machine shops doing practical work on all types of machines. He must understand all types of machine and cutting tools thoroughly. He must have spent considerable time learning how to put his thoughts on paper in the form of mechanical drawings.

When a part is placed before him he can determine what machines and cutting tools must be used to produce it most efficiently.

To show how really vital his work is, let's suppose that, today, a certain firm has an order for a number of medium sized tanks. From the pictures of tanks we know that they travel on long, broad, endless chains. Theoretically they are laying their roadway and taking it up as they run. These endless chains consist of a great number of individual metallic links. Usually these links are made from malleable iron as is the one of our particular illustration.

The machining operations on this particular link consist of drilling and

reaming two short five-eighth inch holes and one long five-eighth inch hole. The pads through which the shorter holes are drilled and reamed must be countersunk on their outer extremities and machine faced on their inner side. The pad through which the longer hole is drilled and reamed must be machine faced on both ends.

The tool designer studies this part. He spends approximately a week making various preliminary drawings and he finally determines that he can make this part with two machines. The first machine which he plans specially for this part will drill and ream all holes, countersink the outer ends of the short holes and machine face the ends of the longer hole. It is planned that all of this work on one part will be done in one minute.

The second operation is to be performed on the standard milling machine by using a special fixture which this tool designer will create. It will machine face the inner faces of the two shorter holes.

This operation can then be performed in less than three-quarters of a minute. Thus the total production time for one of these parts will be about one and three-quarter minutes after the tools and special equipment are completed.

By hand, and without the equipment which this tool designer will create, this same part must go through at least five different machining operations and it will take at least 30 minutes to machine one part.

Efficiency in machining

THUS we can see that this tool designer will make it possible for one man to do the work of approximately 17 men on this particular part, or, in other words, the same number of men will be able to produce approximately 17 times as many chain parts for tanks.

Obviously, the only way we will ever get enough tanks for our requirements and in the time allotted, will be to get each workman to produce the greatest number of tank parts in the shortest possible time. We must not forget that many things other than tank parts are required for modern warfare and we have only one supply of men.

After a thorough discussion with the plant engineers and production executives, this tool designer's idea is adopted and it is decided to produce that tank part by the methods he has suggested. Since this one set of tooling equipment costs approximately \$7,000 and since it is not readily adaptable or changeable for any other work, extreme caution must be exercised to

(Continued on page 72)

Compulsion is weaker than freedom

W. Randolph Burgess
National City Bank of
New York

"Despite the present need for speed there are two good reasons for not rushing into a regimented economy. First, it is not the best way to win this struggle; compulsion is a weaker force than the enthusiastic efforts of a free people. Second, freedom too easily surrendered may be lost. The force we are combating is totalitarianism; let us not surrender to it in advance. . . . There are many in our midst who would like to turn this country into a socialist state and would use this emergency for that purpose."



WIDE WORLD



Home ownership is aided by life insurance dollars invested in first mortgages on private dwellings



Life insurance dollars invested in utility bonds help bring light and power to factories, homes, streets, schools and public buildings



Farmers benefit from life insurance funds invested in first mortgages on farms

How your Life Insurance money works

PERHAPS YOU HAVE WONDERED what a life insurance company does with the money you pay as premiums on your policy.

Maybe you have thought of this money as being put away under lock and key. But, actually, that part of it known as reserves, which is not needed for current claims and expenses, is invested with other funds for the benefit of policyholders. If this were not the case, your life insurance premiums would be higher because, when the Company calculates your premiums, it assumes that the reserves will be invested to produce a stated rate of interest. The reserves must be increased by this rate of interest each year the policy is in force.

► Therefore, the money representing such reserves is put to work in many forms of human endeavor and in all parts of the United States and Canada.

And if you could take a trip from coast to coast, you would see public schools, hydroelectric plants, farms, homes, office buildings, dams, sewer systems, hospitals,

and highways in which life insurance funds have played an important part.

Life insurance dollars, invested in federal and municipal bonds, for instance, are busily at work all over the United States and Canada, helping to finance new bridges, better roads, modern school buildings, and a host of other public improvements.

► On your trip, you would see also private homes, apartments, stores, and office buildings that Metropolitan Life insurance dollars, invested in bonds and first mortgages, have helped to build.

Other life insurance dollars, invested in farm mortgages, are helping farmers to buy their farms, keep farm buildings in proper repair, purchase needed machinery, protect the fertility of the soil, and produce better crops.

Metropolitan has other dollars invested in the basic securities of railroads that serve the public. This money is at work helping to provide new equipment and to move the raw materials that keep factories

humming, men in jobs.

► Other millions of dollars of policyholders' money are invested in plants that help provide light and power for homes, farms, and businesses. Still other millions are at work helping industrial concerns to build better mills, lighter, cleaner, safer manufacturing plants, make better products, and to establish new industries.

Of course, your primary interest in life insurance company investments is to know that they are in sound securities and that they earn the interest which, as previously explained, helps to keep your premiums lower than they otherwise would be. You are also interested in having the Company earn the highest rate of interest consistent with security of principal, for any interest earned in excess of the rate assumed as the basis for the premium may further reduce the cost of your life insurance through dividends. In the meantime, your life insurance dollars are also playing an important part in the social and economic structure of the nation.



Life insurance dollars invested in federal, state and municipal bonds help bring you better schools, roads and public improvements of all sorts



Better living conditions are fostered by life insurance dollars invested in first mortgages on modern apartments

COPYRIGHT 1941—METROPOLITAN LIFE INSURANCE COMPANY

This is Number 34 in a series of advertisements designed to give the public a clearer understanding of how a life insurance company operates. Copies of preceding advertisements in this series will be mailed upon request.

**Metropolitan Life
Insurance Company**
(A MUTUAL COMPANY)

*Frederick H. Ecker,
CHAIRMAN OF THE BOARD
Leroy A. Lincoln, PRESIDENT*

1 MADISON AVENUE, NEW YORK, N. Y.



Washington and Your Business

Goosebones in Strong Demand

POLITICAL prophets agree that the Seventy-seventh will be another year-long Congress. They expect practical unanimity on national defense, a congressional willingness to spend money, and a distaste for further experimenting. They report that, in the last weeks of 1940, practically every congressman discovered at first hand that the people are reconciled to the spending but are not wholly satisfied with methods or results of the defense program. They anticipate a congressional demand for definite and precise information on present facts and future policy which will not get anywhere. A reasonably comprehensive inquiry into congressional thought, as revealed to the prophets, shows a conviction that we will be in a shootin' war inside of six months. April 1 is the date rather generally accepted.

Speaking of Gold Money

THIS may be taken as an accurate statement of the Treasury's point of view on gold holding and buying:

We would like to stop buying. But if we stopped buying we would find ourselves getting I.O.U.'s which could never be cashed. We believe that gold will always be the one medium of international exchange and that bartering will go out of style as soon as gold, peace and prosperity return. We will then—probably—be forced to lend a great deal of our gold stock to European nations to help them get on their feet. If properly handled, such a deal might be of great advantage to us. If gold were to be returned to domestic circulation immediately it is not likely that any effect would be felt. Probably only a few millions would be withdrawn for jingling in pockets.

Eccles and His White Plume

NOTE that a white plume and not a white feather is credited to the head of the Federal Reserve system. Marriner Eccles has been in there fighting from the day he came to Washington. A senator who has been his frequent critic said:

To do him justice I do not believe he cares a continental about politics. His big idea has been the control of national finance through the spending power of the Government—inflate when needed, deflate when necessary—and he has not wavered. Hoover had the same idea.

His anti-inflation report to Congress, in which he was joined by the heads of every institution in the F.R. system, is a direct challenge to the President and the Treasury. Morgenthau and Eccles agree in their fear of inflation but there agreement ends.

Congress will not take from the President authority to devalue the dollar further, in the opinion of observers. Inflation is not feared until there has been at least one more year of war spending.

Two Chances—Both to Lose

IF a utility company, finding itself in possession of money, wished to go to Latin America for an investment, the S.E.C. would say "no." Director Weiner explained:

If the Commission would not permit a utility company to separate its properties in this country by too many miles, it certainly would not allow it to invest in South America.

At first glance it seemed queer that American business men should be compelled to ask Papa where to take a chance, but after inquiry at the Department of Commerce the inquirer's heat abated perceptibly. At Commerce it

was allowed that there are no safe opportunities for investment in South America in any case.

Continuing to Talk Trouble

THE decision of the Supreme Court in the New River case definitely gives the federal Government control over any stream which can be made navigable if Congress is willing to spend the money. For practical purposes this means that further investment in hydroelectric projects by private capital is out. The court further enunciated a new doctrine, by which "flood protection, watershed development, recovery of investment through utilization of power are likewise parts of commerce as a whole." Some observers fear the commerce clause in the Constitution has pushed the Constitution itself out of the tent. Under it almost anything may be done, because almost anything is related to commerce.

May Link With Dred Scott

LAWYERS say this New River decision may one day rate with the Dred Scott case in the history books. Forty-one of the 48 states asked permission to intervene through their attorneys general and were refused. The House passed over a veto a bill giving the states the right to appear in federal cases in which their rights seemed to be in question, but it died in a Senate committee. Some years ago Congress gave the federal Government the right to protect its constitutional powers in court. If the Administration weight can crush any attempt to put the states on a parity with the central Government in this matter—and there is no doubt where the Administration stands—then another long step has been taken on the road to centralization.

Lawyers declare themselves flabbergasted at the lack of public interest in this phase.

Quoting from an Old Tome

"WHERE they got off in the last war was in deciding that they could build ships faster than they could roll steel, and we could not make enough ordinary boilers, or ordinary engines, to go into them," said Homer Ferguson. He is president of the Newport News Shipbuilding company, and the statement quoted was in the 1931 inquiry into the operations of the War Policies Commission:

They started in on flat ships, flat bottoms, which incidentally were harder to make than round bottoms, and with wooden ships and pipe boilers and all sorts of new machinery. As a matter of fact the war shipbuilding plants that were started when the war started did not produce any ships at all that ever got into the war.

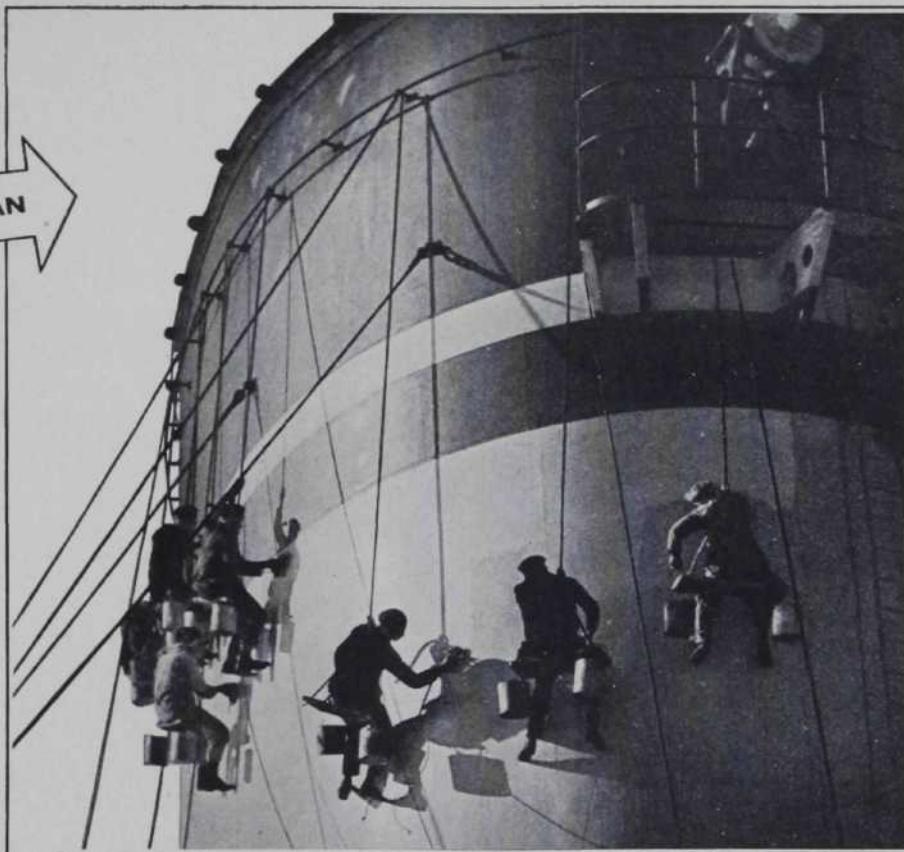
Sharp Bulge in Confusion

SHIPPING men say the announced program for the building of 200 ships to supply Britain's needs is a faithful copy of the fiasco of 1918. "About a dozen small yards could be reconstituted, adapted, or built. All the existing yards will be busy on contracts for years ahead. In about two years' time, or the end of 1942, ships will be coming off these new slipways, if we have luck." Enthusiastic amateurs do not comprehend the enormity of this 200 ship program. The word "enormity" was used with purpose. The standard plan has not yet been drawn for the 200.



"SOOJEE" means to wash paint

The ordinary seaman on a merchant ship spends a large part of his time chipping rust, wielding a paint brush, and "soojeeing"—washing down paint, with a solution of caustic soda. Ideal "soojee" solution is the one which will clean paint fastest without removing too much skin.



TO A BUSINESS MAN

"COMPTOMETER ECONOMY"
means MORE FIGURE WORK
HANDLED in LESS TIME at
LOWER COST



NO CIPHERS appear on Model M answer dials unless they are part of actual answer! The answer, for example, used to read 00000054520. Now it reads 54520.

To progressive executives in every business and industrial field, "Comptometer Economy" means the substantial figure-work savings that can be achieved through the use of Comptometer adding-calculating machines in conjunction with Comptometer methods.

It means high speed—figures while they're "hot"! It means

unique operating accuracy—through Comptometer's exclusive Controlled-Key safeguard, which eliminates that common source of figure-work error, faulty key manipulation. It means adaptability to the specific job or problem.

In short, it means more figure work handled in less time at lower cost! May your Comptometer

representative show you how Comptometer machines and methods save time and money? Telephone him . . . or write to Felt & Tarrant Mfg. Co., 1712 North Paulina Street, Chicago, Illinois.

COMPTOMETER
REG. U. S. PAT. OFF.
ADDING-CALCULATING MACHINES

"It takes as long, generally speaking, to design a ship as to build one," said Mr. Ferguson. Labor must either be stolen from the other yards—which means wage auctions and perhaps labor control from Washington—or trained from the white collars.

"The death and accident rate was very high in consequence," said Mr. Ferguson.

Blueprints for the standardized parts must be sent out, the small-time factories in which the plates are to be cast readied for the new job, and priorities on raw materials and transportation arranged.

The shipping men say the plan is sure to be a headache. After 1918 the newly built ships shot the shipping market into ribbons.

Strange Center of Utter Calm

the corridors of the State Department. They had brought their ships to us for refuge:

"And you took us in," said one Dane, with the wrong tone on the word "took."

Then the word went out to pipe down on the proposition to take the foreign-flag ships. The Danes smiled again. Copies of the English shipping magazine *Fair Play* had reached Washington. This most authoritative voice of British shipping was entirely calm. Tonnage would be found, ships were available, cargoes would be carried into Britain. The definite implication was that shipping is a delicate and chancy trade and would amateurs please keep out.

Shoot a Few More Billions

Congress would come to about \$17,000,000,000. But labor and materials are costing more now, Sam. We'll have to add \$2,000,000,000 more."

Senator Carter Glass sniggered at that:

"Add \$10,000,000,000," he said, "for the business of the Seventy-seventh Congress. You'll be about right."

This, Too, May Pass Away

kind of cackle-minded. No one going anywhere except around. Every one talking, going out to parties, having a lovely time."

Conditions are not that bad, but no one is satisfied. General feeling is that the program will dawdle until some one—Knudsen or another—is given real authority and told to use it.

The same kind of clatter went on in 1918 until President Wilson gave Baruch full authority.

Guesses By a Professional

accepted in trade. We do not want islands. They are sources of nothing but trouble. We will not return any eastern trade routes to Britain after the war. We will begin trading for cable and coaling and oil stations in the East when the lend-lease plan gets under way. Destroyers will likely be used for part-way convoy against the violent protest of the Navy. The Army will try to put

over a Big Army and universal service plan. Always has hoped for it. Income taxes in 1942 will needle the \$1,000 a year man."

Lubin's Good for a Laugh

ISADOR LUBIN says that:

"Industry is loyal. But Industry simply does not comprehend."

He is one of Sidney Hillman's satellites in N.D.A.C., and Commissioner of Labor Statistics under Miss Perkins. But when it appeared that the defense program had no head and no backbone and no plan, Industry proposed that Industry itself select a czar.

The suggestion was dropped after some one paid a visit to Washington. But the facts blunt the point of Mr. Lubin's jab.

Unhappy Lies This Head—

THE case of the "drunken engineer" may yet become a *cause célèbre*. After having been suspended 18 times for violations of the rules he was fired for drunkenness. The case

was reported in the NATION'S BUSINESS for January. Then the National Railroad Adjustment Board—not the National Labor Relations Board—ordered the Pennsylvania road to reinstate the engineer with full pay for the two years he was laid off.

The Board's order was made on a technicality and did not go to the merits of the case. At last accounts the Pennsylvania Railroad has not obeyed.

Railroads are Dog-lawed

UNDER the law the road may not appeal from a ruling of the Railroad Adjustment Board. But it may decline to obey, in which case the other party—for example, the drunken engineer—has the option of going to court. Many of the other roads fervently hope the engineer will do this, and so permit a thorough airing of the law, which is to be amended this winter if the employers have their way.

"They dog-law us," the roads say.

That is railroad slang for taking advantage of legal technicalities. In a case reported the crew of a switch engine rolled onto the rails of another road to get their backs to the cold winter wind while they waited for their switching job. Under the law they could collect \$35 for that back-warming—and did. The battle promises to be lively.

Britain Can Hold Until Snowfall

MILITARY experts say that Britain can hold out against the worst Germany can do until snow begins to fall next winter. The expert opinion is that it isn't the bombs the Britons fear, but the terrible stenches of the shelters.

Six feet away from the doors of the shelters one meets a wave of warm air, laden with every form of stink . . .

Because this means an almost inevitable epidemic, the experts fear that, under the President's definition of our defensive doctrine, this will compel us to put our own ships in the carrying trade soon.

Plenty Pilots for New Planes

SCATTERED through the land are 700 flying-schools. Some are little more than a cow-pasture and a \$900 plane. Most of them have been low in the financial water for years past. All of them, practically, have been run by men who have the same unstoppable urge for flying that painters have for paint and Dorothy Parker has for limericks. These compulsions are not to be explained or evaded. The war program—might as well stop calling it the defense pro-

Modern Style Note

OLD-FASHIONED RUNNING BOARDS ARE OUT!



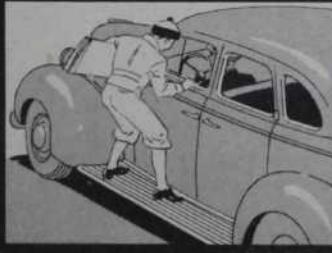
You certainly won't find them on this swank, streamlined Chevrolet for '41. . . . You'll find "Concealed Safety-Steps" at each door of its famous Body by Fisher. . . . You'll prefer them for styling and for easy, comfortable entrance and exit!



NO DANGEROUS SNOW AND ICE



NO DIRT OR MUD



NO "JUMPING ON" CAR

GIVE LOW-PRICED CARS THIS "QUALITY QUIZ" AND YOU'LL CHOOSE CHEVROLET!

	CHEVROLET	NO. 2 CAR	NO. 3 CAR
90-H.P. ENGINE	YES	NO	NO
CONCEALED SAFETY-STEPS	YES	NO	NO
VACUUM-POWER SHIFT AT NO EXTRA COST	YES	NO	NO
BODY BY FISHER WITH UNISTEEL TURRET TOP	YES	NO	NO
UNITIZED KNEE-ACTION	YES	NO	NO
BOX-GIRDER FRAME	YES	NO	NO
ORIGINAL FISHER NO DRAFT VENTILATION	YES	NO	NO
TIPTOE-MATIC CLUTCH	YES	NO	NO

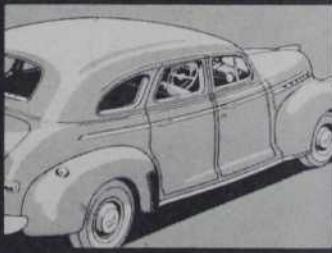
YOU'LL SAY
"FIRST BECAUSE IT'S FINEST"



NO "SITTING OR LOITERING"



SAFER, EASIER ENTRANCE AND EXIT



SMARTER, MORE MODERN STYLING

CHEVROLET MOTOR DIVISION
General Motors Sales Corporation, DETROIT, MICHIGAN

Again CHEVROLET'S THE LEADER!

gram—has restored to solvency those who were sunk deepest.

Their Cadets Are Flying

IT is doubtful if any nation ever did so big a civilian pilot training job in so short a time.

Not even the Nazis, apparently. About 45,000 students are being trained in 1941, in classes of about 15,000. The President's budget cuts this training program by one-third in 1942. And here's something for the book:

The entire C.P.T. program over 1940 and 1941 has resulted in only 15 student fatalities and, including all accidents to both students and instructors, is about five times safer than any previous instructional program for the country as a whole. To date we have fed 2,600 flyers and 500 instructors to the defense program.

Plan to Save Insurance

MOVEMENT of young men from civilian jobs into the army. He urges that:

The question of insurance protection for civilian defense workers employed by the federal Government and for the young men going into the military service be given immediate attention, lest they lose the insurance rights they have previously built up (in jobs which are covered by the insurance system).

He argues, too, that states might well amend their laws to provide a waiting period of only one week for unemployment compensation, that the duration of benefits be increased to a uniform maximum period of not less than 16 weeks, and that the benefit rate should bear some reasonable relation to full-time earnings rather than to low average earnings.

Tax-Exempts Sure to Come

ALMOST no dissent that Congress will grant the Treasury's wish and stop the issue of tax-exempt federal securities. No chance that this order will be made retroactive. Pretty soon the move will get under way for the reciprocal taxing of income from federal, state and local bonds. This is *not* impossible. At least some of the tax pundits think that the public is becoming so tax conscious that this is a possibility.

A Spot of Reassurance

FACT seems to be the pair get along nicely. Knudsen's faint Danish accent mingles with Hillman's faint Lithuanian tones and in perfect good temper. Report is that when the pair begin conversations on labor matters they get off where they can be alone. Secretaries Stimson and Knox are not avoided. They are just evaded.

Railroads Stand at Attention

THE I.C.C. asked in its report to the incoming Congress that it be granted additional powers, in view of the emergency created by the defense program. But the railroads say with one voice they were never in such perfect readiness to handle freight. Trucks and busses say they are fairly well regulated now. The waterways seem to be under control. A cynic observes that the I.C.C. merely saw a good chance.

Everyone Gets Under the Flag

PRACTICALLY every governmental activity is, has been, or will be hooked up to the defense program. No one has been found in Washington who in his heart believes that a penny will be cut from the normal costs of running the Government. Even the St. Lawrence power and seaway plan is described as a defensive measure, although no turbine could be turning and no ship levelled through the proposed locks short of five years.

Lowdown on Walter Bill

THE Walter bill—in its first lifetime the Walter-Logan bill—will be passed by both houses in 1941 with the necessary two-thirds to get over the veto. So say the specialists on the bill. If its friends had been thoroughly satisfied with its first form it might have been put through in 1940 with more than enough to defy the Administration's opposition. It is promised that the flaws will be corrected during its 1941 promenade. Some of the corrections will be made by members of the Attorney General's committee, which seems to have been hopelessly split.

Looking for a New Job?

AN inquirer into our folkways has determined that no less than 1,500,000 Americans are engaged in part or full time war relief work. That is one in ten of our total population, including the islands. It does not include others engaged in doing for others, who are not war sufferers. A total of 295 organizations are sending clothing, food, medicine and the like to war sufferers daily.

Axes Falling Where They May

GOSSIP has it that Corcoran and Cohen are going to take that chance to practice law in New York, because some of their liveliest ideas have misfired publicly, that Rex Tugwell tried to get back and failed, that Jesse Jones has a candidate for the position of Warren Pierson, head of the Export-Import bank, and that Dr. Millis is going to houseclean the N.L.R.B. This will not, however, stop the effort being made to amend the law.

An Ex Parte Look at Life

LEON HENDERSON'S associates say he is perfectly satisfied with his plan for price control. "He bargains" they say. "He negotiates, he talks, he writes letters. Maybe he threatens a little. So he gets his way. He thinks he can get along without more specific authority from Congress."

His friends do not touch on what is a distinctly sore subject, but the fact is that back of Henderson and at a hostile distance is Assistant Attorney General Thurman Arnold, who bristles with talk of indictments and actions at law. If Henderson had too much trouble with an industry he would merely toss it to Mr. Arnold.

This Feudin' Don't Hurt

STATE and Treasury are engaged in a quarrel over control of all foreign exchange transactions. The purpose is to have a weapon with which to smash foreign propaganda here, control sales and purchases, and get a line on saboteurs and plotters.

Only difference between the departments is which gets it.

Herbert Corry



"Dad, why do they put it under the street?"

"Because, Son, in a big city like this there isn't room in the streets for enough poles to carry all the telephone lines needed."

Cable is one of the many items of telephone apparatus which Western Electric produces. Were it not for cable, millions who now have telephones could not have them. Well ahead of public need, Western Electric has for years pioneered in improving the art of cable manufacture, packing more wires into limited

space, insulating them from each other more perfectly, and making the outer lead covering more resistant to destructive forces.

Telephones, switchboards, vacuum tubes—to name but a few others—all embody the same manufacturing skill.

Thus this Company, source of supply for Bell telephone companies, helps make the service they give the most reliable, most economical in the world.

Western Electric

*...is back of your
Bell Telephone service*

Too Dangerous for Use in War!

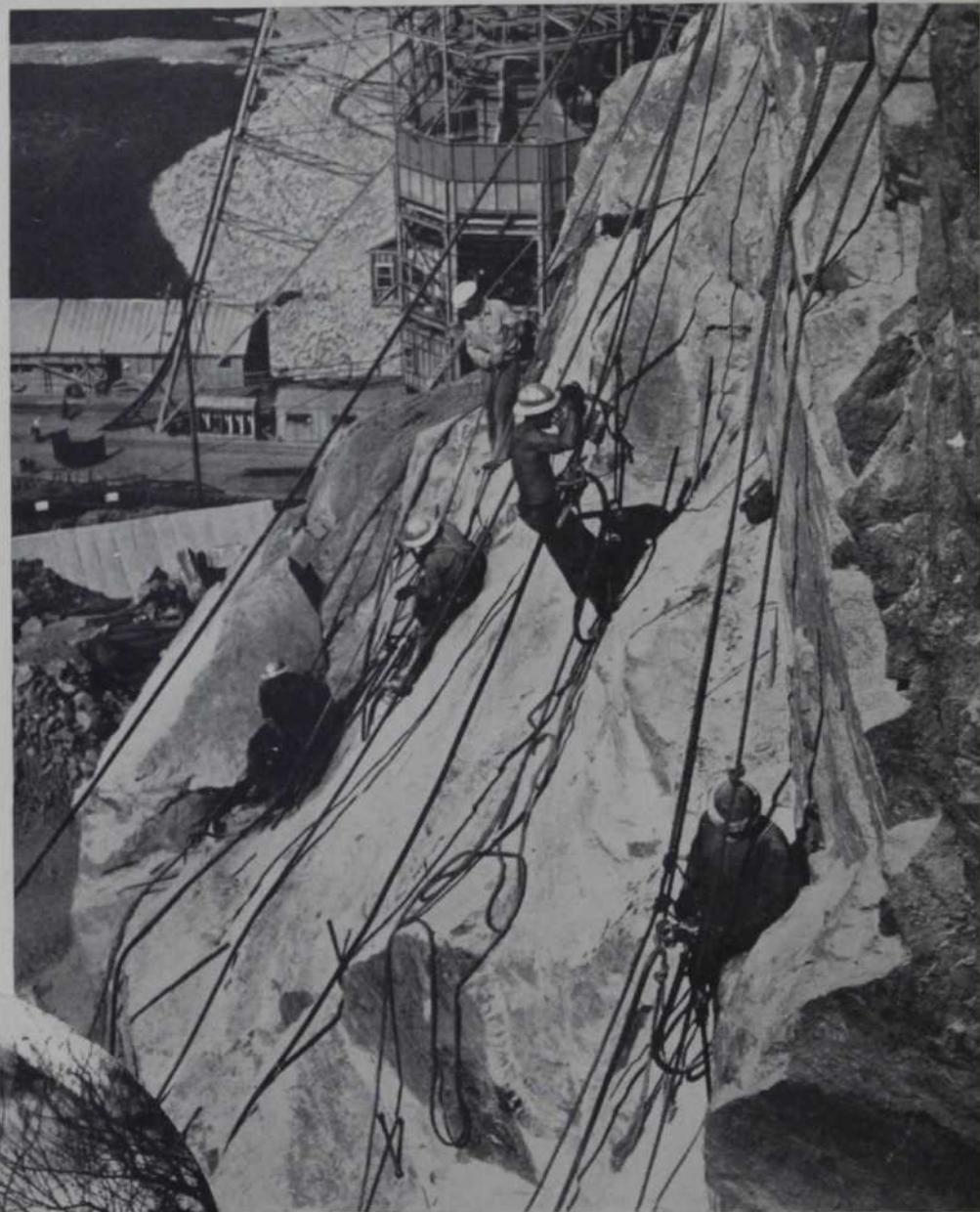
By PAUL W. KEARNEY

THAT'S DYNAMITE. Yet, every business day some 1,000,000 pounds of it are used in peace-time occupations. Experts become so adept that they can use it indoors and never crack a window

DYNAMITE is strange stuff. Actually too dangerous for use in heavy cannon, it can be used for mosquito control work in the Jersey salt marshes and for snow removal in Rocky Mountain National Park.

Upwards of 1,000,000 pounds of it are used every working day in this country in mining, quarrying, engineering, agriculture and a dozen other fields. Yet the strange fact is that military explosives such as smokeless powder or TNT are too weak and too expensive for these jobs which are deftly handled by an explosive that would be unsafe in war.

Dynamite, of course, couldn't be used



EWING GALLOWAY

A million pounds of dynamite in 800 miles of holes was used to clear the site for the Coulee Dam



EWING GALLOWAY

The right charge in the right place, and a log jam is broken—it's all in knowing how

to propel a shell from a gun because it would blow the gun to smithereens. Neither could it be used as a bursting charge in a shell because the shock of shooting the shell from the gun would wreck the weapon—not to mention the gunner.

Nevertheless, you'll find thousands of farmers safely and efficiently removing stumps with dynamite. You'll find geologists using it to locate oil—lumbermen using it to crack off the tops of high trees—harbor men using it to move ice jams—safety experts employing it to "blow out" oil well fires. From single charges as big as 215 tons in one blast you can see it used in such delicate operations as roughing out the 80-foot letters in Gutzon Borglum's 500 word history in his epic sculpture in the Black Hills of South Dakota.

ARTHURS



**It pays to be
a show-off**



Get Attention for Your Store with a Pittco Front

SHOPPERS notice the handsome store with a shining Pittco Front. Its gleaming surfaces and striking colors promise something extra in the way of value and service that people are quick to investigate. And every time a new customer is drawn into your store, it is added evidence of the soundness of your modernization investment.

Up and down the country you'll find stores of every size and type, in almost every community, which have been remodeled with Pittco Fronts

and today are selling more goods. Business increases of 15% to 75% have been reported from stores modernized with Pittco Store Fronts. What a Pittco Front has done for others—it can do for you!

The wide variety of Pittco Store Front Products, and their ready availability through hundreds of Pittsburgh branches and jobbers everywhere in the country, make it possible for us to supply you with a complete store front job, suited to your particular requirements, in a design as in-

IT'S HARD TO BELIEVE but both pictures show the same location, taken before and after remodeling with a Pittco Store Front. "We find our new front has been a tremendous asset in attracting people to our store," writes A. M. Adelman of Arthur's Furniture Store in Decatur, Illinois. Architects for this job were the Engineering Service Corporation. Note the attractive PC Glass Block panels on either side of the center show window.

dividual as you wish.

When you remodel, see your architect to assure an economical, well-planned job. Our staff of experts will gladly cooperate with him in planning a Pittco Front to suit your needs. For your convenience, you can pay for your new front on the Pittsburgh Time Payment Plan—20% down and the balance in monthly payments. Mail the coupon for our free book.

PITTCO STORE FRONTS
PITTSBURGH PLATE GLASS COMPANY
"PITTSBURGH" stands for Quality Glass and Paint

Pittsburgh Plate Glass Company
2204-1 Grant Bldg., Pittsburgh, Pa.

Please send me, without obligation, your new, illustrated booklet, "Pittco Store Fronts — and Their Influence on Retail Sales."

Name.....

Address.....

City..... State.....

The most amazing thing about dynamite, however, is the uncanny precision with which expert handlers can make it perform so many unbelievable tasks. Razing obsolete brick smokestacks is a frequent order for the blasters—and a fellow who didn't know his dynamite could spread one of these stacks over half a county with no difficulty. These fellows, however, will not only lay the stack where you specify, but if you care to stand a stick upright in the ground, they'll drive it all the way in with the falling chimney.

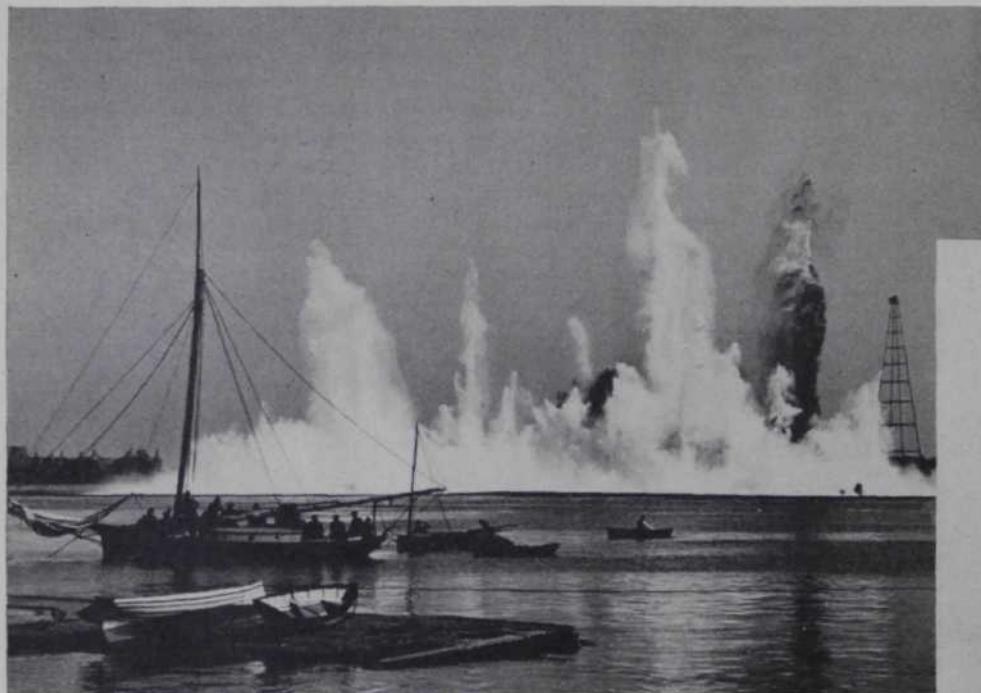
Indeed, they'll do even more difficult tricks than that. In one recent case the only possible area where the tumbling stack could safely fall was 30 per cent too short to accommodate the full length of the chimney. So the ingenious blaster merely set two charges, one at the base; the other part-way up the stack.

Firing the lower one first, he toppled the giant stack toward the narrow area where it must fall. Then, when the structure was part way down, he fired the upper charge, folding the top of

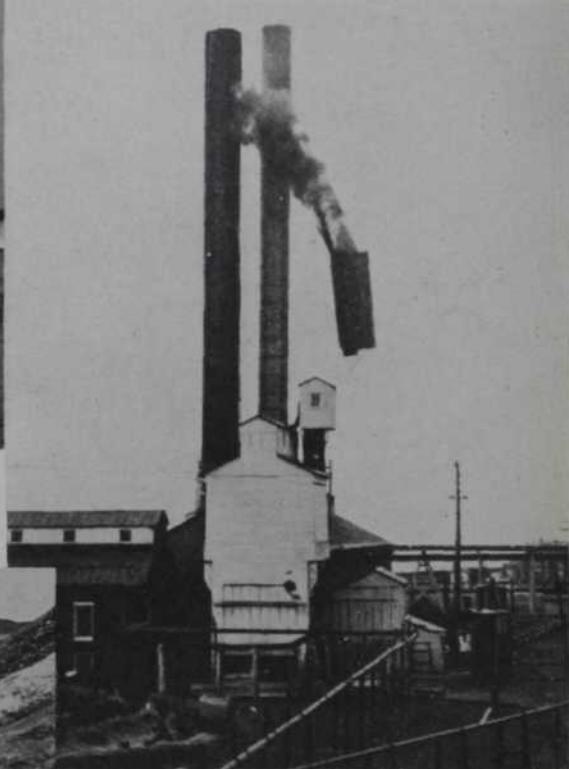
the chimney back on itself and dropping both portions within the required space!

That's figuring things out to a nicety—but that's the blaster's specialty. In remodeling a factory, for example, it was necessary to remove some machinery bases of concrete, ranging ten to 12 feet high and six feet thick. The walls and roof were practically all glass and some extremely delicate pieces of electrical machinery stood not more than ten feet distant, any disarrangement of which would have been costly.

Undaunted by all these hazards, the blasters blandly set their charges and reduced the concrete bases to fragments. And not only did they complete their job without cracking a pane of glass or disturbing any of the electrical equipment—but, just to show how good they were, they put a brimful



Under or over water, it makes no difference to the expert blaster. Here dynamite is deepening the Hell Gate channel and clearing it of rocks



Tall chimneys are broken as desired and pieces dropped where they are wanted



Ditch digging is a prosaic task that dynamite handles speedily. This is how 13 tons of it looks moving a mountainside to make room for a canal

glass of water on the floor near one of the invaluable machines and completed the entire dynamiting job without jarring a drop out of the glass.

On another occasion a wall was blasted out of a metropolitan bank while business went on as usual and not a single bookkeeper made a single blot. And when you stop to consider how many reinforced concrete buildings are demolished by dynamite in our busiest cities without even detouring traffic—or how many miles of subways have been blasted under New York's

(Continued on page 78)



Multigraph-Multilith Duplicating Methods have *Cracked this Nut*

If business is to function efficiently, many kinds of ink-on-paper jobs are essential . . . letterheads, inter-office and field communications, ruled forms, sales and collection letters, direct advertising, promotional literature.

In the average business, providing these necessary items is an expense sufficiently *big* to merit thorough investigation . . . a nut to be cracked if costs are to be kept as low as possible.

You'll find the solution for your business in the wide range of Multigraph-Multilith duplicating methods. Using those exactly suited to your needs, you

can save substantially without sacrificing the quality you require in your duplicated material.

Multigraph-Multilith versatility enables you to do more kinds and a better quality of duplicating than you may realize. Its flexibility adapts it to small or large quantities. Its speed assures prompt completion of each job. Its simplicity makes it practicable for use in your own offices, by office workers.

For complete information and samples, call MULTIGRAPH SALES AGENCY (listed in principal city telephone books) or write to

ADDRESSOGRAPH-MULTIGRAPH CORPORATION • Cleveland, Ohio

ADDRESSOGRAPH-MULTIGRAPH OF CANADA, LTD., TORONTO

Sales Agencies in Principal Cities Provide Service Everywhere

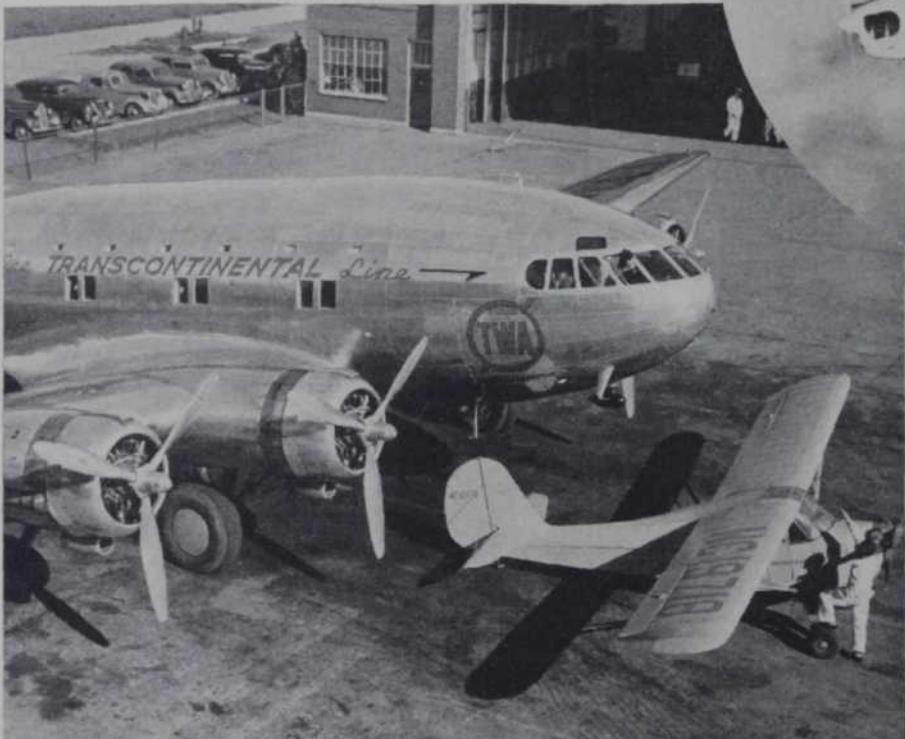
TYPICAL DUPLICATING FOR MULTIGRAPH-MULTILITH METHODS

- Letterheads and Envelopes
- Office and Factory Forms
- Catalog Pages and Inserts
- Price Lists and Quotations
- Instruction and Parts Books
- Direct Advertising Material
- Typewritten Letters and Bulletins
- Complete Personalized Letters
- Messages on Post Cards
- House Publications
- Dealer Imprinting on Folders
- Display and Price Cards
- Gummed Labels and Stickers
- Cartons and Wrappers

Multigraph and Multilith Duplicators

The Family Airplane Rounds the Corner

By S. ALTSCHUL and M. VAN SLYCK



The private flier needs the transport pilot's technique no more than the yachtsman needs the sea captain's

A NEW ERA in aviation is unfolding—not one identified with bombings and fighting planes—but one identified with peace. The "flivver" plane, the model "T" of the airways, has passed its trial and error stage, and there are many signs pointing unmistakably to a growth and expansion of civilian air travel which bids fair at least to rival, if not eventually exceed, the economic changes which followed the advent of the automobile.

These changes and the growth of a new mode of travel are virtually assured in the developments of today and of the immediate past. One has only to ask a few questions to bring that point home. What of the huge production facilities for manufacturing fighting craft which war needs dictate? More important, what of the vast number of fliers created through emergency training, both civilian and military? These latter form the backbone for a long and increasing demand for

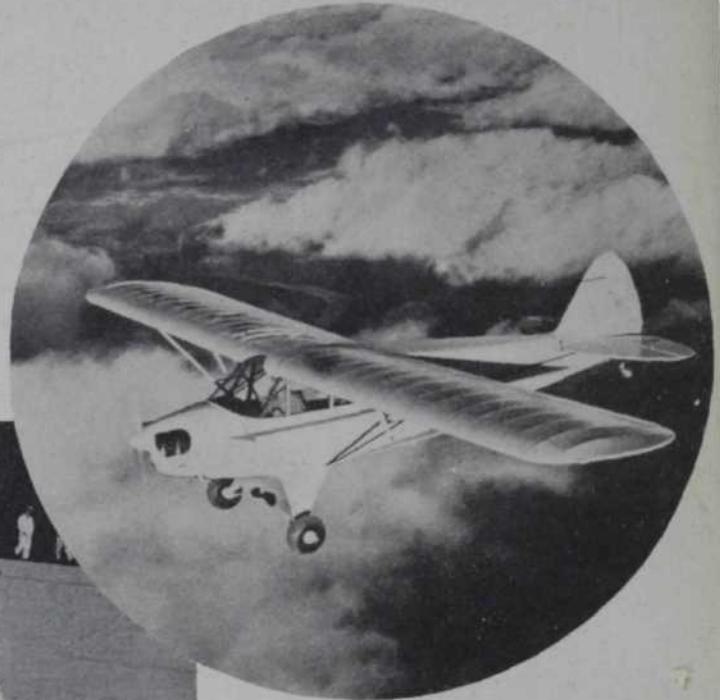
small, cheap and safe airplanes and the skilled workers and plant facilities are available to fill that demand. It is not reasonable to assume that plants will be scrapped, that workers will quit making airplanes and that fliers will quit flying.

Small planes are here

FOR years the day of the "family" airplane has been "just around the corner." But that opinion has been indulgently viewed as an expression of hope by the perennial optimists with which the aviation industry abounds. Now, however, there are facts to support that statement. The flivver plane is here and it is going forward rapidly.

The questions arise: How did the flivver plane get that way? Where will it lead to? What effect will it have on the nation's transportation habits and on our economy?

These and a host of other questions



Modern motors have increased the range of the little ships

ALTHOUGH military aviation is getting most of the present emphasis, the industry itself is busy with a program aimed at peaceful flying which promises to bring economic changes rivalling those fathered by the automobile

present themselves when inventory is taken of the rapidly advancing small plane industry.

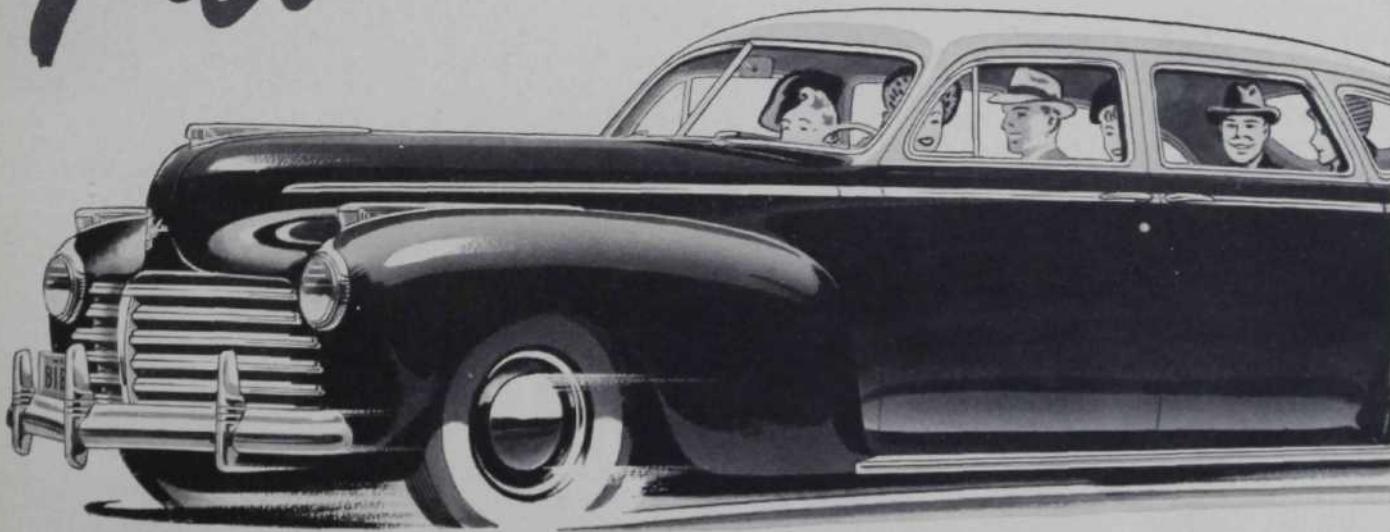
The logical approach is to see just what constitutes a flivver plane; to determine if it is safe enough (don't be horrified at the phrase "safe enough," look up highway accident statistics); and if it is cheap enough.

A flivver plane is a one to three place job; weighs on an average about 1,300 pounds; generally has an enclosed cabin; is of high wing type; and is powered with a motor of generally less than 75 horsepower. Contrast this with the huge 45,000 pound "Stratoliners" with a passenger capacity of 33 and crew facilities for five.

Now, turning to price, we find that they start with \$995—frankly a "come on" price similar to the \$599 and \$690's f.o.b. *sans* certain equipment, with which the automobile industry has long been identified. The price does exist, however, and the \$995 plane will

**There's No Substitute
for**

Fluid Drive



THERE'S NO POWER SO FLUID AS THE POWER OF FLUID DRIVE!

ONCE in a blue moon, a really big advance sweeps into motoring. Everybody talks about it . . . alert people try it . . . enthusiasts rave about it . . . and smart buyers get tomorrow's car today!

When are you going to try Chrysler's *Fluid Drive* with Vacamatic transmission?

Slip behind the wheel of a Chrysler and go adventuring. Drive for hours without a thought for clutch or gearshift. Get the feel of driving in high and still having dozens of speeds without a shift! Stop . . . start . . . stop . . . all without touching clutch or gearshift!

See how Chrysler's Vacamatic transmission gives you the power you want when you want it . . . like the variable-pitch propeller on a plane!

Get the feel of the combination of Chrysler's Spitfire engine and *Fluid Drive*! It takes a great engine to give great performance . . . but there is no substitute for *Fluid Drive*. It takes a great engine and *Fluid Drive* to give you the kind of power you get in a Chrysler! There is no power so fluid as the power of *Fluid Drive*!

Try these things before you buy any new car. Be critical. Judge for yourself. See if you can afford to buy any new car without *Fluid Drive*. Your Chrysler dealer cordially invites you. Make a date today!

*Tune in Major Bowes, CBS, Thursdays, 9 to 10 P. M., E. S. T.

FOR SAFETY!
**Why Chrysler includes a Safety Clutch
with Fluid Drive!**

The Safety Clutch is like a lifeboat on a ship. You will use it very seldom, but you're mighty glad to have it when you need it. A very valuable safeguard for parking . . . for maneuvering your car in close quarters or dangerous places!



BE MODERN WITH FLUID DRIVE

Buy Chrysler!

fly. An added \$150 or so will buy a completely equipped and comfortable airplane. From that point on, prices move upward with the purse being the governing factor, just as in the automobile field.

Easy purchasing plans

FURTHERMORE, it is no more difficult to buy an airplane than to buy an automobile. Time payments, one-fourth or one-third down and the balance in 12, 18 or 24 months, are offered. Interest rates are the same as for cars. Centrally located sales rooms are no rarity, especially in metropolitan areas. Moreover, there is a growing tendency among automobile agencies to view with favor the inclusion of a line of light aircraft. As in the earlier days of auto sales, free flying (driving) lessons are also included with the purchase price.

Though prices now look low compared to what they were a few years ago, they are lower still when it is realized that, while they are trending downward, performance of the small aircraft is trending upward.

A significant step forward was the widespread adoption of the light plane motor in the 51-70 horsepower range. Until about two years ago, light planes were nothing but "airport planes," that is, confined to flying around the airport. The limitations of their 40 horsepower engines provided a cruising speed of only 60 to 80 miles per hour and their range was short. Moreover, engine failures were more frequent in those days.

The development of a 50 horsepower motor, however, with no great increase in price or weight, gave the light plane market a tremendous impetus. It is

significant that, while only fourteen single engine aircraft with motors of 51 to 70 horsepower were built in the first nine months of 1938, the total increased to 957 for the first nine months of 1939 and to 3,031 for the initial nine months of 1940. With these higher-powered motors, the flivver plane can cruise for 350 miles or more on a regular fuel load. Such increased cruising range has made possible worth while trips and broadened the utility of the light plane.

More power, better flying equipment, and significantly, more refinements—the latter in the form of upholstering, coloring, and other luxuries—are appearing. It wasn't until the automobile had definitely passed the experimental stage that many refinements and "extras" now offered were available. Our private survey among all leading manufacturers of light airplanes leads to the opinion that, when final figures on production for 1940 are assembled, they will show the manufacture of more than 5,000 planes.

This is not a particularly impressive picture in comparison with the millions of automobiles produced annually. It is especially noteworthy, however, in that production is on the upgrade, and, with the introduction of "in line" mass production methods of manufacture, the light airplane soon will be sold as cheaply as the lowest priced automobile.

If present production could be doubled, costs would decrease from ten to 15 per cent and, if the industry were making 1,000,000 or more planes a year, prices between \$550 and \$650 would become a reality.

The price structure has been explored thoroughly for the important reason that, unless airplanes can be

placed within reach of the masses, the industry never will assume mass production characteristics, regardless of advances in safety.

That the small airplane has come into its own, so far as safety is concerned, is most quickly and impressively illustrated by insurance statistics. It is a fair assumption that insurance companies are realists in the matter of writing risks, including aviation risks.

The experience of the Civilian Pilot Training Program, sponsored by the Civil Aeronautics Administration, provides a sufficiently broad case history from which to present a compact and accurate survey of trends in insurance rates. Launched in 1939 with an initial enrollment of 10,000 students, the C.P.T.P. expanded its activities to include some 45,000 in its training courses for 1940. Before this program was started in 1939, the premium for \$3,000 coverage of a student pilot was \$35. For the C.P.T.P., the rate was initially set at \$20. Late in 1939 this was reduced to \$14. At the outset of the 1940 summer course, this was cut to \$10. For the autumn course, the rate was further reduced to \$9.

Safety compares with automobiles

SINCE 1939 approximately 55,000 pilots were trained or started in their training. The case history, according to latest available statistics, shows that there was one student fatality for every 10,000,000 miles of flying. This makes flying under the C.P.T.P. about as safe as driving an automobile under ordinary conditions.

So, there are the prices—low enough even now to compete with the automobile. And, there are the safety sta-

(Continued on page 64)



Already the private plane has refinements in the form of upholstery, coloring and other luxuries that the automobile took many years to develop as standard equipment

HANS GROENHOFF

What Every Young Driver Should Know



Statistics tell us you young folks—12,000,000 of you, under 24—have nearly a third of all automobile accidents each year.

There's no sense in that.

You dance and play football better; you play tennis and swim better than the older folks—there's no reason why you shouldn't drive automobiles better.

You can and you will if you'll slow down more and speed up less; and if you'll use more brains and less brakes.

When you're at the wheel of a car, you're in control of two tons of steel, glass, rubber and people. Two tons in motion generates a lot of force! Two tons in motion, under control is a lot of fun. Two tons out of control is a lot of destruction.



Here are some good driving tips:
Holding onto the wheel with the left hand a little above center, right hand a little below, is the "McCoy" way of steering. (If it were a clock, hands would stand at "ten minutes of four.")

You know as well as anyone that slamming up a hill lickety-split or passing a car on a hill is suicidal—you may meet anything from cows to a moving van.

Don't make a nervous wreck out of everyone by trying to beat everything on the road "to get there first." It isn't cute and you only save a few minutes.

Slow down on curves (braking before you meet them) or you may play a harp before your time—and not in the school orchestra, either.

When the pavement's slick, it's time to use all your brain. Don't slam on the brakes. Ease to a stop, with clutch engaged and engine slowing you down.

If you start to skid, keep your head level and your car turned with the skid. Lay off the brakes. Your head should tell you whether to step slowly on the gas or take off your foot entirely.

When the road's wet, slippery or icy, is no time to "hang on anyone's tail"—

allow a much greater "following" distance than when things are dry.

Beware of wet leaves and damp dust from side roads—they're slippery.

To start on ice, try high or second gear, let the clutch in gently, to keep wheels from spinning.

On a foggy night, creep along—a captain of a ship does that when he's running through "pea soup". If you have a lookout with you, post his head out of the window to guide by the edge of the road.

You wouldn't drive with your eyes shut, so why "out-drive your eyes" with your eyes open? In other words, don't trust any road any farther than you can see.

Remember, signals were developed for drivers to use. Signal before you pull out from the curb; signal before you turn; signal before you stop.

Don't stop with a jerk or start with a lurch. You have something to hold onto—other passengers may get cracked.

The signs of a skilled driver are how he stops and starts; how he backs and parks;

the smooth, easy way he flows along; the neat, professional way he makes his turns.

There are two sides to every road, your side and the other fellow's—the middle belongs to no one.

For more information on good driving, send for Lumbermens new free booklet, "Why Ask for an Accident?"—let your parents read it too.

Lumbermens for years has been waging a crusade for safety on the highways of this country. Our "Not Over 50" Club and this series of advertisements directed toward youth at the wheel are examples of this crusade by Lumbermens.

Advantages of accidents that don't happen are easy—lives are saved; property is spared.

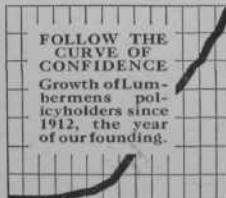
But there are other real advantages which safer driving means for policyholders.

Fewer accidents mean fewer claims. Fewer claims mean greater dividends paid back to policyholders.

Lumbermens premiums are as low as you can find for safe, sound insurance. Our dividends are proportionately high. And when you take out a Lumbermens policy—you are also helping along the cause of safety.

Why not follow the Curve of Confidence? See a Lumbermens agent when it's time for your next automobile casualty insurance.

There are Lumbermens representatives in every state in the union, and throughout Canada.



Lumbermens

MUTUAL CASUALTY COMPANY

JAMES S. KEMPER, President Home Office: Mutual Insurance Bldg., Chicago
Operating in New York State as (American) Lumbermens Mutual Casualty Company of Illinois



REPUBLIC MECHANICAL RUBBER PRODUCTS

REPUBLIC

CARRIES A BIG LOAD FOR THE NATION'S INDUSTRIES



a point of pride with Republic that the belts selected to carry the load on many of these gigantic systems are of its manufacture. Other Republic Belting and Hose items fill equally important assignments for industry on such operations as power transmission, deep oil well rotary drilling, pneumatic tool work, conducting all types of fluids, etc. Every industrial field has found Republic Mechanical Rubber Products capable of the most efficient, dependable performance on vital jobs. REPUBLIC RUBBER DIVISION OF LEE RUBBER AND TIRE CORP., YOUNGSTOWN, OHIO.

The World's

largest belt conveyor systems are built and operated by American industry . . . a typical indication of superior resourcefulness and efficiency. It is

ORDER
REPUBLIC
RUBBER
PRODUCTS
FROM YOUR
DISTRIBUTOR



REPUBLIC RUBBER

HOSE • BELTING • PACKING • MOLDED PRODUCTS



LEADERSHIP IN POLICY
PRODUCT AND PERFORMANCE

"Recovered"

but Still on Relief

(Continued from page 22) listed as "unemployed" and thereby became eligible for "relief" at their pleasure on convenient W.P.A. projects in their own neighborhoods.

Yes, our experience indicates rather clearly that the Administration has left many loopholes in the laws regulating the dispensing of relief.

As to the second observation that W.P.A. enrollees, themselves, are partially responsible for the failure to end the system in our county, the evidence just presented can be examined in reverse and be made to apply equally as well.

A fairly large percentage of the W.P.A. workers in this community undoubtedly know they do not deserve federal help and would not be entitled to it under former non-emergency standards.

There are others—a larger number—who are physically unable to qualify for jobs in private industry and who need assistance for themselves and their families.

In other days, however, work on roads and elsewhere was made for many of this class by villages, townships and other subdivisions. This group may include as many as 50 per cent of those still on W.P.A. here.

Depending on government

A THIRD easily described segment may be said to include those who are either too lazy or afraid to take employment in industry where some competitive effort may be required, and who have come to believe stoutly in the theory that the "Government owes them a living."

We admit to having some of those individuals in our midst.

Now, for a confession and an answer to a question that may have occurred to you:

Why, if it had reduced unemployment to such a fraction of former totals, didn't Sidney, on its own account, dispense with W.P.A. on May 1, 1940, and pay its own relief bills?

Frankly, Sidney could have done just that. It was financially able, as probably were other village and township subdivisions in the county. Sidney, as of April 30, had an actual surplus of \$5,667.19 in its municipal relief fund.

It could have assumed responsibility for its percentage of the county's W.P.A. population and, in the absence of jobs for them to do, could have cared for them as direct relief cases which, during April, had been handled at a *per capita* monthly cost to the city of \$18.70.

In Ohio, cities share with the state the cost of direct aid—that given to persons physically unable to do any kind of work. Sidney already had a few of those cases—18, to be exact.

It could have increased the number and, with funds on hand and in prospect from state taxation, probably have paid

the bills without a great deal of trouble until January 1, 1941.

But, when the showdown on such a plan arrived, second-guessing was done and, in the end, good old common sense ruled.

In other words, our public officials and our taxpayers "saw the light."

We came to understand that, if we didn't get our quota of W.P.A. cash, some other community would. We agreed, furthermore, that it wouldn't be equitable and fair to our citizens to care for all of our own needy while, at the same time, continuing to contribute our share to the national fund collected for that purpose.

Finally, we became downright mercenary in thinking that, after all, free money is free money and might conceivably be used to carry out worth while and needed improvement projects.

True, we had had our share of W.P.A. "nightmares," including the celebrated dam at Port Jefferson which dams only half of the stream it was intended to dam. We knew, furthermore, that W.P.A. inefficiency probably would inflate the cost of even sound improvements.

But we figured that, with the Government paying 75 per cent of the charge, we would still be ahead of the game.

Whereupon, civic pride succumbed definitely—and painlessly.

So Sidney is still on W.P.A., despite its "perfect recovery" and its defense boom which created 1,000 jobs but removed only 100 from federal relief.

In the beginning, its predicament seemed a mystery. Now, the situation no longer baffles us. We have our three-way explanation.

We simply ran up against an economic stone wall beyond which we couldn't advance, present beliefs and attitudes being what they are.

We doubt if other cities, given "perfect recovery" as was Sidney, will be able to go farther.

The Challenge of the Market Place

(Continued from page 26)

lives to impartial scrutiny or be unworthy of its trust. But nobody likes to be scrutinized impartially, and the scrutinizer cannot hope for universal popularity.

The truly representative university opposes the forces that make for mud-dlement. It opposes, too, all forces that make for mediocrity and indifference. It opposes that constant tendency toward compromise and corruption which afflicts all of us as we pass through life and even through that part of it called the market place. It stands for the true order of means and ends. It symbolizes the moral, intellectual, and spiritual purpose of human life and the eternal dignity of the human person. The free university is the outward manifestation of our inward grace, the sign of our belief in the highest powers of man and of our confidence that freedom, truth and justice must prevail.



TRUCKS are profitable business tools only when they're moving. They are "white elephants" when they stand idle while being loaded or unloaded. That's why so many executives in so many lines of business have adopted the Truck-Trailer "shuttle" method of hauling. You leave only the Trailers to be loaded or unloaded and use your truck for the full-time job of pulling first one and then another of the Trailers ready to be moved.

HERE'S HOW YOU SAVE

You need buy only one truck and the Fruehauf Trailers. The truck can be a small instead of a large one since its job is simply to pull the Trailers, not carry the loads. (As you know, a

WRITE FOR THE FACTS—

Like so many others, you may find a "shuttle" operation ideal for your needs. In any event, you should save considerable through the Truck-Trailer method of hauling. Send today for the booklet "Executive Thinking." It tells the whole story.

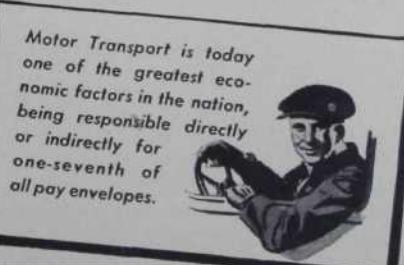
truck can pull three times as much as it can carry.) Your investment will be far lower for the one truck and the Trailers than it would be for several larger load-carrying trucks.

BIG SAVINGS HERE

Gas and upkeep for the small truck will cost much less—you'll save 30% or more, depending upon your operation. That's an important saving on top of your saving on initial and replacement cost.

World's Largest Builders of Truck-Trailers

TRUEHAUF TRAILER COMPANY • DETROIT
Sales and Service in Principal Cities



TRUEHAUF TRAILERS

"Engineered Transportation"

REG. U.S. PAT. OFF.

MAN TO MAN

in the

MONEY MARKETS

By CLIFFORD B. REEVES

Government Bonds Taxable?

be so great that the banking system, which has absorbed the bulk of new Government issues in recent years, cannot be expected to buy all the bonds that will have to be sold.

Even if the banks could provide most of the money, such a course would be highly undesirable. They are loaded to the gunwales with Government bonds already, and absorption by them of large amounts of new issues would create serious dangers of inflation because of the further increase in bank deposits that would result.

So the Treasury Department, seeking to tap other sources of funds, has rediscovered the "forgotten man," the small investor. For many years, he has been neglected and abused. Interest rates have been driven down so that income from his savings is negligible. Likewise, the income from his insurance estate is now only a fraction of what he expected.

During a time when investing was most difficult, he has been denied the opportunity to subscribe to many of the choicest issues that were gobbled up by the big investing institutions.

But now he is needed again, to help finance the defense program. So he will be wooed, and exhorted to place his savings in Government bonds. Appeals will be made to his patriotism and, like the good fellow that he is, he will respond generously.

The present yields on tax-exempt Government issues, however, are not sufficiently high to attract the funds of the average investor. So the Treasury is talking now about eliminating the tax-exempt feature from future Government issues. The theory behind this is that the higher yield on taxable bonds will bring the small investor into the market, while the collection of taxes from large holders

will more than offset the higher interest rate that the taxable bonds will carry.

The Treasury already has the right to issue taxable notes, and recently offered a \$500,000,000 issue of that type, which was well taken. But before long-term taxable bonds can be issued, an act of Congress, or possibly a Constitutional amendment, will be needed.

It is rumored that any such amendment may be framed so as to give the federal Government the right to levy taxes against income from future issues of state and municipal bonds as well as federal bonds. Any such move is certain to be bitterly opposed by various states and municipalities. They would have everything to lose and nothing to gain. They would have to pay much higher coupon rates on their issues, simply to provide the federal treasury with additional tax income.

Many municipalities, moreover, might find it difficult or impossible to sell their issues at all without the lure of tax exemption. In addition to these strictly financial considerations, many advocates of States' Rights are opposed in principle to anything that gives the federal Government tax powers that might be used as a threat over the states.

The practice of issuing tax-exempt securities started many years ago when the total of federal, state and municipal debt was not large, and when the loss of tax income resulting from the practice was not important. Today, however, with the growth of government debt of all types, the income received by investors from tax-exempt securities runs into billions annually, and the loss in tax revenues is consequently very large.

Many bankers strongly favor the elimination of tax-free provisions. They feel that such privileges have given governmental bodies an unfair advantage in competing with private industry for capital. They believe that the low interest rates at which tax-

exempt securities can be offered have encouraged reckless borrowing and municipal extravagance.

A prohibition against tax-exempt securities has been talked about by the Treasury Department for many years, and is known to have been favored by Secretaries Glass, Mellon and Mills, as well as by Morgenthau. If the move is ever to be attempted, this is a most auspicious time, because it could now be based upon an appeal to patriotism in connection with the need for new sources of tax revenue in a time of national emergency.

Things to Expect in 1941

PROGNOSTICATION is a dangerous business, particularly in the fast-changing

world of today. But business men have to look ahead and plan ahead, and therefore must necessarily form some opinions as to what the future is likely to bring.

Conversations with bankers, industrialists and business men in recent weeks indicate that most of them expect the following developments in 1941:

Industrial activity will continue to expand and will break all former records before the year ends.

In spite of a large increase in business volume, profits in total will be only moderately greater because of higher taxes, price controls and probable increases in wage rates.

Consequently, no great stock market boom is expected even though business improves greatly.

Money rates, although they may harden somewhat, will continue to be low. The wages of capital will remain small.

Unemployment will be greatly reduced, and actual shortages of labor may develop in many industries.

There will be a general stiffening of commodity prices, but controls will prevent any serious inflation of the price structure.

The general cost of living will rise only slightly.

There will be an expansion of bank credit, and the volume of new security issues will substantially increase.

The Government itself will continue to be a major source of capital for private business.

Because of the defense emergency, industry will be subjected to much of the same government control, regulation and direct competition that the financial community has had to adjust itself to in recent years.

Exchange Fighting for Survival

PRESIDENT Martin of the New York Stock Exchange recently raised a storm of

protest when he proposed what was euphoniously called a plan for "equalizing" registration requirements for listed and unlisted securities. What Martin suggested, in effect, was that all unlisted securities be arbitrarily subjected to the same restrictions and



The Legions of Credit are Mobilized

Behind the vast production machine of national defense, now beginning to mesh into gear, stand billions of credit dollars mobilized in the commercial banking system of the nation.

This great army of credit dollars assures industry of sufficient funds to meet the demands of our national defense program. It answers the call to

service at costs to the borrower lower than ever before in the nation's history.

The Chase National Bank, in its manifold relationships with banking and industry throughout the country, is co-operating in the effort to make our "dollar army" effective and useful, to the end that the needs of the nation may be met swiftly and fully.

THE CHASE NATIONAL BANK
OF THE CITY OF NEW YORK

Member Federal Deposit Insurance Corporation

New PHILCO ROOM VENTILATOR for offices, homes and apartments

Enjoy fresh, clean, filtered air and quiet comfort all year 'round

Here is real news—big news! You can now have perfect ventilation...fresh, clean, filtered air...in your office or any room in your home the whole year 'round—for only \$39.50. The Philco Room Ventilator—a new engineering development—gives amazing performance—

- Brings in Fresh, Clean, Filtered Air ... 475 Cubic Feet Per Minute.
- Shuts out Noise, Dirt Dust.
- Exhausts Stale, Stuffy Room Air ... 110 Cubic Feet Per Minute.
- Recirculates Room Air ... 185 Cubic Feet Per Minute.

The Philco Room Ventilator makes your office or home quiet and comfortable...you work more efficiently...you sleep better...winter and summer. Handsome Walnut wood cabinet, easily installed in 30 minutes. Investigate the new Philco Room Ventilator...see your Philco dealer or mail the coupon now!

*Price slightly higher Denver and West

Philco Radio & Television Corp., Dept. No. 554
Philadelphia, Pa.

Please send me, without obligation, your illustrated Folder on the new Philco Room Ventilator together with details of your Easy Payment Offer.

Name _____

Street _____

County _____

City _____ State _____

regulations that now apply to listed issues.

As matters now stand, a corporation does not have to register with the S.E.C. unless its securities are listed on an exchange, or unless it has issued new securities since 1933, when the Securities Act became effective. Corporations that are not registered enjoy greater freedom from regulation. This has led many companies to refrain from listing old securities. Even when new securities have been issued, some corporations have preferred not to list them. Unlisted trading has been enjoying a steady growth in recent years, while trading on the Stock Exchange has diminished steadily.

Martin's proposal did little to endear him to other elements in the securities business. They felt it was a case of "misery loves company." There were immediate howls from unlisted security dealers and even from stock exchange member houses because many exchange firms do a large and profitable business in unlisted bonds and stocks.

The critics of Martin's program said that he was adopting a dog-in-the-manger attitude. They claimed he was saying to the unlisted securities markets, "If I can't have freedom from burdensome restrictions, you can't have it either." They pointed out that the unlisted market was already completely regulated under the Maloney Act.

Whether Martin's proposals for "equalizing" conditions in the listed and unlisted markets were sound is open to serious question. But there is no doubt that the conditions he seeks to correct are gradually placing the Exchange at such a disadvantage that its business is being ruined.

Because of overregulation, markets in listed issues are so thin that much trading in them now takes place in the over-the-counter market rather than on the floor of the Exchange. More than 90 per cent of all the trading in bond issues listed on the New York Exchange doesn't go through the Exchange at all, but is handled in the unlisted market. Recently there has been a rapid growth in "off-the-board" distribution of listed stocks. Because the listed market is so thin and unsatisfactory, holders of large blocks of listed stocks find that they can sell them to better advantage by arranging for their distribution through security dealers in the unlisted market.

During the past year, a large volume of business in listed stocks has escaped the Exchange in this way. Among the big blocks that changed hands in the unlisted market were 200,000 shares of Commonwealth Edison, 296,000 shares of United Gas Im-

provement, 100,000 shares of Standard Oil of Indiana, 179,000 shares of Consolidated Edison of New York and 65,000 shares of Chesapeake & Ohio, to mention just a few.

Another "leak" that the New York Exchange is seeking to plug up is that which has resulted from the development by other exchanges throughout the country of duplicate markets in the same securities that are listed in New York. These territorial markets have been encouraged by the S.E.C., and are diverting an increasing volume of business from New York.

In an effort to block this trend so far as it could, the Exchange recently enforced its rule against multiple trading, which provides that no member of the New York Exchange shall make a market on the floor of any other exchange in any issues that are listed on the New York board. When the S.E.C. requested that this ruling be rescinded, the Exchange felt so strongly about the matter that it refused to comply, although it did agree to postpone the effective date of the ruling.

This brought about the first head-on collision between the Commission and the Exchange in the past several years.

The growing disposition of corporations to refrain from listing their securities, the rapid increase in off-the-board trading in listed issues, and the development of multiple exchange markets in New York issues are all seriously cutting into the business of the New York Stock Exchange. The sad state of the Exchange's business was recently reflected in the sale of a seat at \$32,000, the lowest price in 41 years.

Many financial people, however, even including Exchange members, feel that the answer to the problem does not lie in dragging the unlisted markets into the same welter of red tape and regulation that now entangles the Exchange, but rather in obtaining relief for the Exchange itself and in the development of a constructive program for increasing business in listed securities.

One proposal that many Exchange firms favor is a lengthening of trading hours. Another is a plan for sharing commissions with thousands of non-member security dealers who now make no attempt to interest their customers in listed securities because they receive no compensation on such transactions.

Most New Issues Sold Privately

FIGURES on new security offerings in 1940 indicate that, in the corporate field, more bond financing was done in circumvention of the Securities Act than in

compliance with it. The reason for this, of course, is the growth of the practice of selling new security issues privately, rather than by registration and public offering. Private sale is no longer the exception, but the rule. In 1940, according to figures compiled by the New York Times, the total of corporate bond and note financing, exclusive of railroad issues, was \$2,300,000,000. Of this amount, approximately \$1,300,000,000, or more than 56 per cent, was sold privately without registration under the Securities Act.

Since 1936, when private sales accounted for only seven per cent of the total corporate bond financing, a steadily increasing percentage has been offered by the private route. In 1937 private sales accounted for 17 per cent of the total; in 1938, 39 per cent; in 1939, 44 per cent.

The further growth of this practice in the past year has tended to focus more attention on it; and it is expected that ways of plugging up the existing loophole in the Securities Act will come in for serious consideration at the hearings that are expected to be held early this year on the need for possible changes in the securities laws.

New Issues in Greater Volume

THE total of public security flotations took an encouraging jump in December, and plans for new issues being made by many leading corporations indicate that the first quarter of 1941 may witness still further increases.

Offerings made in the New York market in December totaled more than \$513,000,000.

This was more than double the November figure, and nearly twice the total for December of last year. Bond flotations in December were the largest for any single month in the past four years.

Aside from the gain in the overall figures, a number of interesting and healthy trends were apparent in the December offerings. A substantial portion of the financing done was for new money purposes, rather than mere refunding of outstanding securities.

Furthermore, financing for industrial companies showed a considerable increase. And stock issues accounted for a larger percentage of the total than has been the case in recent years.

Industrial expansion due to the defense program seems certain to bring many corporations into the money market in the near future, and investment bankers expect that security flotations will show a substantial increase in 1941.

"Good Morning!"

... I'm the Little-Man-Who-Wants-to-Know ...



- "Now—what have we here?"
- "Well, sir—this is a NATIONAL Typewriting-Bookkeeping Machine, used extensively by manufacturers and wholesalers. . . . It is built to fit practically any system—"
- "Like a rubber glove?"
- "Right! And this machine is fast, flexible, easy to operate. It is the only machine built having standard typewriter and adding machine keyboards, two automatic daters, symbol-printing keys, direct visibility, a maximum of automatic features, removable stop bars—"
- "But why? And what for?"
- "For handling payroll records, accounts receivable, accounts payable, billing, listing and so on—"
- "You see, NATIONAL makes a complete line—machines for listing, posting, proving, analyzing,

check writing and signing, remittance control and more—"

- "CONTROL! That's essential today! . . . Thanks for the tip."
- "Remember—these machines pay for themselves many times over! They are made by the makers of NATIONAL Cash Registers—engineered and serviced by specialists. Whatever your problem, see NATIONAL first! . . . Call the local office TODAY."



INVESTIGATE

National ACCOUNTING MACHINES!

THE NATIONAL CASH REGISTER COMPANY • DAYTON, OHIO
Cash Registers • Posting Machines • Check-Writing and Signing Machines
Bank-Bookkeeping Machines • Typewriting-Bookkeeping Machines • Analysis Machines
Postage Meter Machines • Accounting Machine Desks • Correct Posture Chairs



Oysters Talk—for Greenport



Workers take oysters from cull bins and size-grade them into baskets



Oysters pour from washing tanks into monel skimmers and are made ready for packaging

THROUGHOUT these United States there are always a few communities suffering from temporary doldrums because some particular industry around which they were built has surrendered to obsolescence. Critics of our industrial system who blame business for the plight of these communities seldom take any account of the scores of towns that have been resuscitated by that same business enterprise applied in a different manner and brought up-to-date by men who are willing to risk failure and able to meet competition.

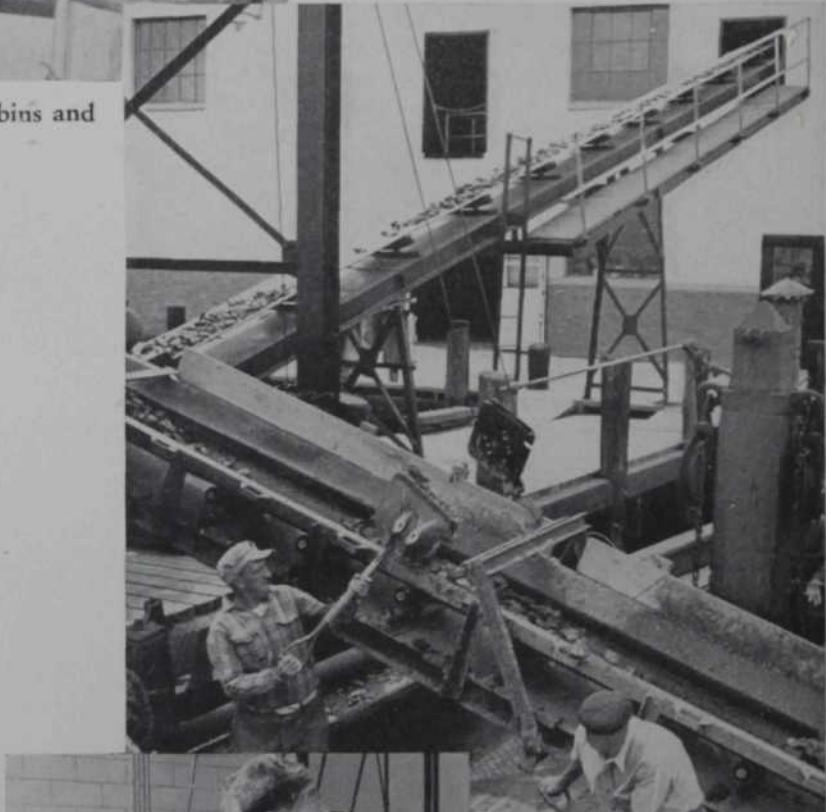
Greenport, L. I., offers an object lesson. In 1800 it prospered from the activities of a local \$1,000,000 whaling industry. When the whales disappeared from neighboring waters in the early nineteenth century, citizens had to depend primarily upon small fish catching but that industry, too, dwindled to negative proportions, except for the menhaden fisheries.

But, around 1900, individual enterprisers moved in and started planting seed oysters. Today scientific oystering brings \$1,500,000 into the area annually and a new \$200,000 plant for fresh, canned, and quick-frozen oysters has been recently completed by the Bluepoints Company, Inc., a subsidiary of General Foods.

The plant at capacity will employ more than 200 men in the harvesting, opening and shipping of oysters. Sheltered from winter weather in Gardiners Bay and benefiting from a land-locked boat basin, the new plant serves to free the market of uncertainties caused by winter storms.

Four boats can be unloaded simultaneously at the rate of 1,200 bushels an hour. "Oysters," says the law, "may be caught only in daylight hours." As each dredge docks, the crew shovels the cargo onto a conveyor. Oysters drop from the pier conveyors into a cull bin where those selected for shipment in the shell are graded by hand into five different sizes which range from "small" counting 1,300 to the barrel to "box" size counting 550 to the barrel.

Odd sized or misshapen oysters are conveyed to the shucking department where 38 men each open from 4,000 to 5,000 a day. After inspection and washing, the oyster meats are dumped into gravity graders and packed in cans according to sizes ranging from 250 to 150 in a gallon. Those selected for quick-freezing require about an hour and a half. A unit can freeze 300 gallons a day.



Unloaded on a cushioned carrier conveyor, oysters move up an 18 degree incline



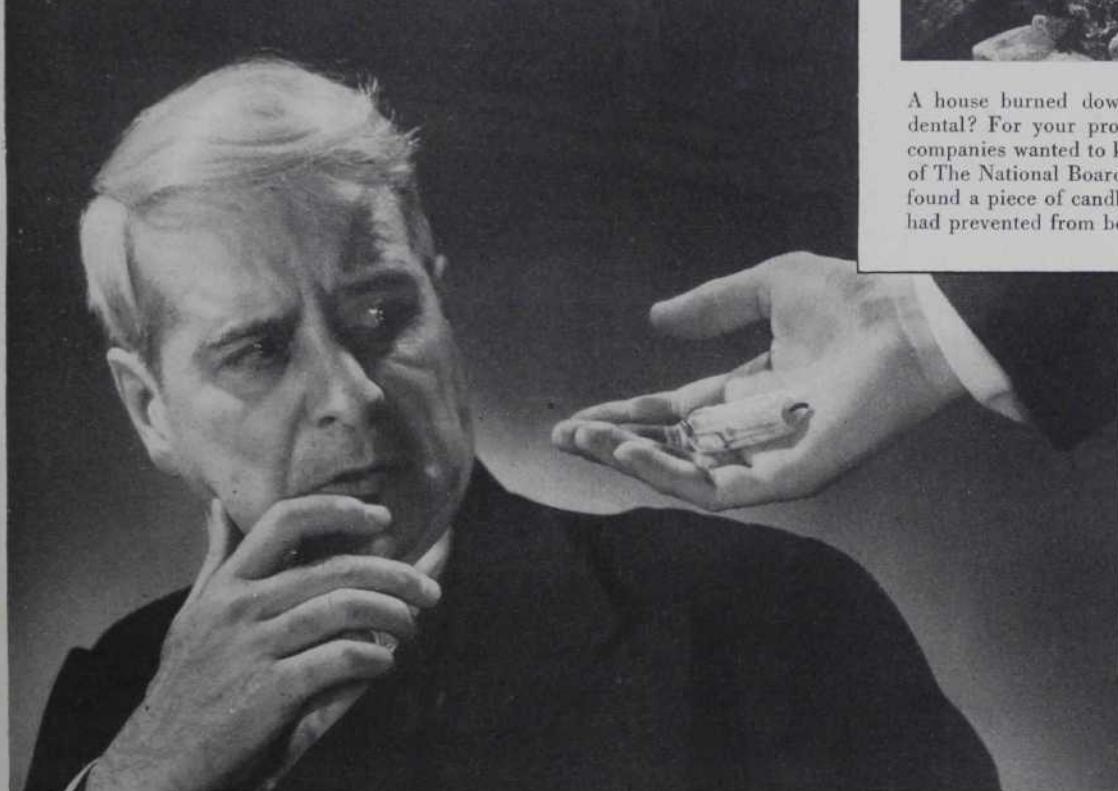
An automatic sealer closes cans ranging from 5 gallons to one-twentieth gallon

The clue of the half-burned candle

(An actual firebug case)



A house burned down. Was the fire accidental? For your protection, the insurance companies wanted to know. The Arson squad of The National Board of Fire Underwriters found a piece of candle, which a falling wall had prevented from being all consumed.



This slight clue led to investigation, which resulted in a confession...and conviction of the owner.

If crooks can get away with arson, there'll be more fires, more fire losses...and higher insurance costs. So successful is the Arson squad of the capital stock fire insurance companies, in cooperation with local authorities, that arson has been reduced...countless human lives have been saved and the cost of fire insurance has been lowered.

THE NATIONAL BOARD OF FIRE UNDERWRITERS, 85 John St., New York • Est. 1866
Nation-wide organization of 200 capital stock fire insurance companies



When you buy your fire insurance through a local agent or broker, you have the advantage of his on-the-spot, personal service.

CAPITAL STOCK COMPANY FIRE INSURANCE

Market Gleanings

From Golden Rule Week to Terrapin Day . . .

Records . . . Dresses . . . Audimeters

Special weeks and days continue to multiply until the marketer finds for 1941 a crowded calendar from which to select timely themes for promotion tie-ups. January started off with what many persons must have regarded as a bizarre coincidence in the fact that Inauguration Day and Make Your Will Day both fell on January 20. Then there were Bean Day, Child Labor Day and Own Your Own Home Day, besides Tobacco Week, Tea Week and Thrift Week. The report that Thrift Week had been abolished as publicizing an outmoded virtue seems to have been premature.

February ushers in National Defense Week, Cherry Week and Sew and Save



Week, not forgetting Social Hygiene Day and Race Relations Sunday.

With the idea of March come Baseball Week, Wild Life Week, Fish Day and Orange Day. Uncle Sam proclaims a taxpayers' day "on or before" the 15th but the victims are not expected to celebrate it.

April brings the dilemma of trying to recognize Be Kind to Animals, Foot Health and Fishermen's Weeks all at the same time. That means no fishing for advertising men.

Equally busy is May if you hope to celebrate Flood Control Week, Music Week, Restaurant Week, Golf Week, Buddy Poppy Week, Tennis Week, Cotton Week, Raisin Week and Hospital Day. The lowly Egg gets a week and the Rooster but a day. Which at least should settle the ancient metaphysical controversy as to whether the egg or the rooster comes first.

And so it runs throughout the year, except for August, which boasts only one national event—Aviation Day. With Mother's Day, Father's Day, Mother-in-Law Day, Children's Week, Baby Week, and Better Parenthood Week thrown in for good measure, all members of the family are represented. Dogs have more than their day; they are allotted a whole week, and so are horses. With the country resounding to the tramp of armed men and the oratory of Get-Ups-Into-War Committees, it is surprising to discover that peace on earth is heralded by International Golden Rule Week, Peace Week, World

Good Will Day, Friendship Day and Fraternal Day. Gypsies, Hoboes, Authors and Indians each have a day.

Two weeks are set aside for the promotion of tea drinking, two to the Girl Scouts and two Moving Days. Products honored for a day or week range all the way from Terrapins to Pancakes.

Low-priced records are proving to be good market strategy. Leaders in the phonograph recording industry had long insisted that it never could be done profitably but Decca controverted this theory with fast-selling popular records at 35 cents. Then, last August Columbia announced its "Masterworks for Millions," and reduced all 12-inch Blue Label records to \$1 and 10-inch Blue Labels to 75 cents. Victor followed almost immediately with similar reductions. As a result, record sales have skyrocketed. Those who said it couldn't be done admit that it has been done.

Sales of records by newspapers likewise have opened up astonishing possibilities in large-volume turnover at narrow margins. Although these recordings carry no names either of manufacturers or artists, they are made by two of the leading companies. According to C. B. Larrabee in *Printers' Ink*, one newspaper in three weeks sold more than 60,000 sets of Tchaikovsky's Nutcracker Suite as played by an anonymous orchestra, exceeding by 10,000 the total sales of this top seller by one of the well known companies over a period of several years.

An electric tooth brush for consumers is the latest achievement of the age of mechanical servants. It is made by Electric Motor Corporation, manufacturers of equipment for doctors, dentists and laboratories, and has already been in use by dentists for several years. The brush sells for \$7.50. It is backed by extensive magazine advertising.

The eclipse of Paris has brought fashion's capital to America, but New York must fight to keep its garment trade from going inland to Chicago, St. Louis and elsewhere. So the Joint Dress Board says. The Board, made up of nine representatives from the three dress goods manufacturing associations in the metropolis and a chairman from the International Ladies' Garment Workers Union, was formed on the initiative of the union.

Leaders of the I.L.G.W.U. profess themselves quite as much concerned with business development as the manufacturers. It is expected that a joint promotion fund supported by both workers and employers will be raised. To prove that new markets

for dresses are waiting to be opened up, the Board adduces statistics showing that the average woman spends more for undergarments than for dresses. Women's "unseen wear" accounts for 8.6 per cent of department store sales and dresses only 6.7 per cent.

Radio's attractions for consumers will no longer be a subject for guesswork or telephone surveys now that "audimeter" tests are available. The audimeter is a mechanical recording device developed by A. C. Nielsen Co., market researchers. When attached to a radio it records on a tape every turn of the tuning dial and enables the researcher by comparing this tape with broadcast schedules to determine what programs have been listened to and for how long.

The Nielsen Company has had 200 audimeters in test homes in the Middle West and expects to install probably as many as 5,000 altogether. They will enable advertisers to check the claims and ratings of radio programs as made by radio media.

Macy's in New York City has taken the lead in opposing resale price maintenance since it first appeared in the retailing field. Beginning with a list of private brands, not price-fixed, and sold in its own store, the Macy Company soon spread out in a drive for distribution in other stores outside New York City. Now, it is reported to be wholesaling 300 of its 3,000 private brands, most of the wholesale items being drugs and cosmetics. Supremacy Products, the Macy Line, boasts approximately 100 drug-cosmetic outlets in self-service grocery stores and supermarkets.

Naturally, the druggists do not look with favor on this effort of the big department store to enter into widespread competition with them through unorthodox drug outlets. It is strictly price competition but it thrives in a battle with frozen prices of some advertised national brands.

The advertising tax bill of Rep. Jerry Voorhis of California died with the Seventy-sixth Congress but is reasonably sure to bob up in some form in the new Seven-



ty-seventh. As originally introduced, it provided that advertising expenditures in excess of \$100,000 a year could not be deducted as a selling expense in income tax computation. Legislative and lobbying expenses, including attorneys' fees incurred in advocating or opposing business legislation are placed in the same category. The bill frankly attacks liquor, tobacco and luxury advertising as economic waste.

Large advertisers contend that, since advertising is a form of selling, such a law would, in its effect, be akin to a head tax on salesmen.

*Count the Readers per dollar
instead of Lines per dollar*

...then you'll go ROTO, too!

Reach the Entire Family With Roto —the Class of the Mass Circulation

• Roto is used by advertisers to increase sales of nearly every type of merchandise. In 1939 alone more than 100 national advertisers, in nearly as many different lines, used Roto for the first time. They joined the vast army of Roto users who know that a newspaper's Rotogravure Section attracts the maximum number of potential reader-customers.

For the past eight years, surveys conducted under the nationally-accepted Gallup method have conclusively proved that Sunday Rotogravure Sections get a reader traffic averaging second only to page one in volume!*

Moreover, your advertising in Roto gets "preferred position" regardless of the page on which it

appears. Roto's magnetic subject matter—appealing to all classes and age groups—sustains reader traffic on every page.

You can use Roto nationally, regionally, or locally. If you wish, you can use Roto to cover better than one out of every two of the nation's homes. Or you can utilize Roto's flexibility to advertise in a selected city or zone.

Learn what Roto has done for products or service similar to yours. For complete information write Kimberly-Clark Corporation. We maintain a service, research and statistical department for the convenience of advertisers and publishers. There is no charge for our service, which is available to you at each of our offices.

*Based on a continual analysis of reader traffic in 21 papers in 17 key cities.

Rotoplate
REG. U. S. & CAN.
PAT. OFF.

THE NATIONALLY-ACCEPTED
ROTOGRAPHY PAPER

Manufactured by
KIMBERLY-CLARK CORPORATION • NEENAH, WISCONSIN
Established 1872

New York: 122 E. 43rd St.

Chicago: 8 S. Michigan Ave.

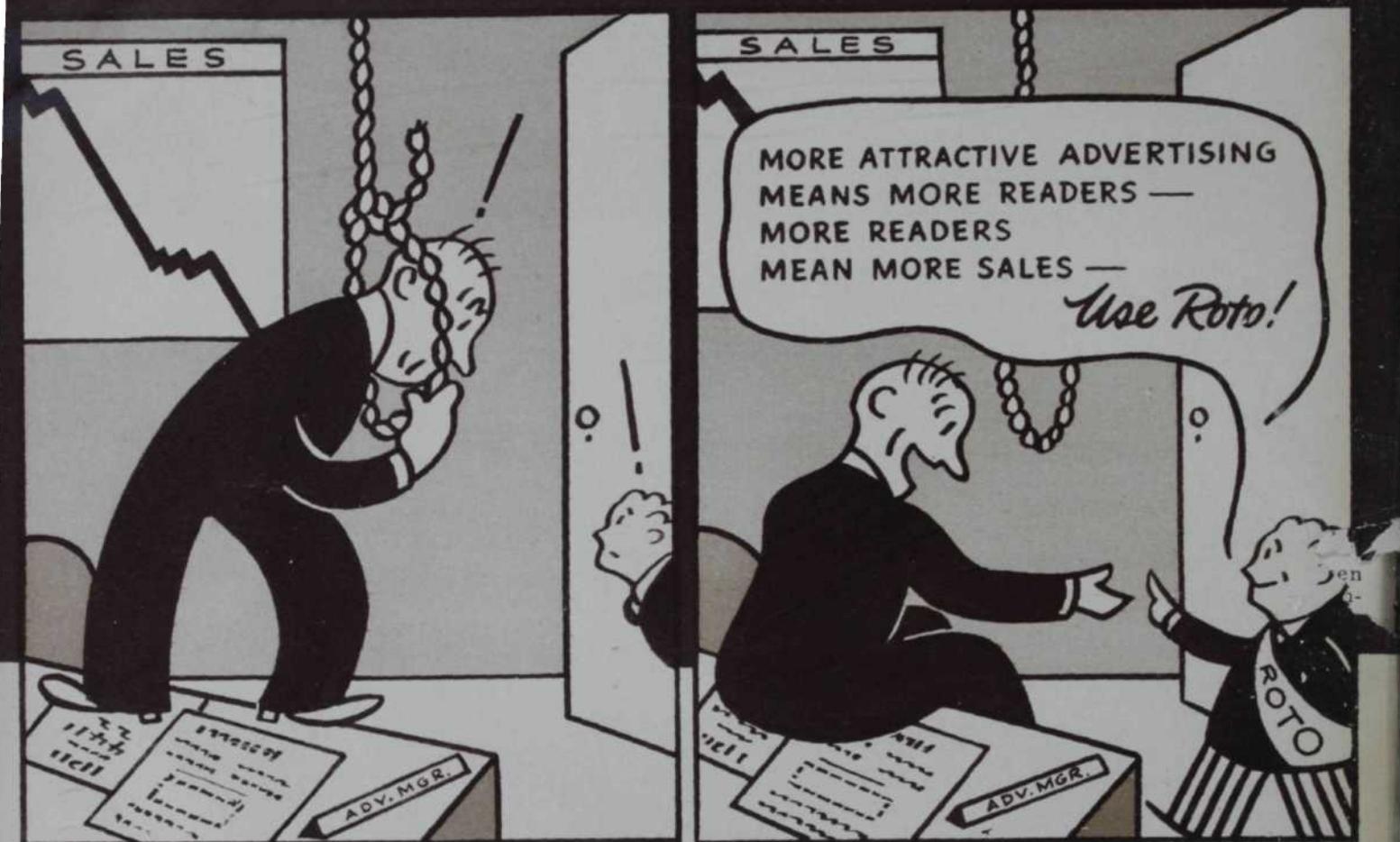
Los Angeles: 510 W. Sixth St.



ROTO IS SECOND ONLY TO PAGE ONE IN MEN READERS
ROTO IS SECOND ONLY TO PAGE ONE IN WOMEN READERS



Rotogravure means Business!



YOUR advertising benefits by pluses that are bound to bring additional results, when you advertise in the Rotogravure Sections of Sunday newspapers.

One important plus you get when you advertise in Roto is "preferred position." No matter what page your ad appears on in Rotogravure Sections, it is flanked by editorial matter which attracts a larger reader audience than any other pages of the Sunday paper which are open to advertisers.

As you know, the Rotogravure Section is one of the most eagerly sought

sections of the paper. It appeals to everyone who can influence a decision to buy your product. Mother, Father, young and older children turn to the Rotogravure Section for beautiful and dramatic pictures of the world's news.

Rotogravure is recognized as the "de luxe" section of Sunday newspapers. It has a distinctive, high-grade atmosphere which naturally envelopes the advertising in it—glamorizing and giving additional prestige to products advertised therein. Your product is realistically pictured in Roto's rich monotone or thrilling natural colors, making iden-

tification easier—substitution more difficult at point of sale.

Write Kimberly-Clark Corporation for special studies on reader interest given to Rotogravure advertising drawn from your own classification. If you advertise a food product, a special portfolio of women's or food product advertising with a special analysis is available to you. Similarly with drugs, cosmetics, etc. In this way we may be of help to you in selecting a medium which can promise you a maximum potential audience of newspaper readers. There is no charge for our cooperation.

Rotoplate
REG. U. S. & CAN.
PAT. OFF.

THE NATIONALLY-ACCEPTED
ROTOGRAVURE PAPER

Manufactured by

Kimberly-Clark Corporation Established 1872 **Neenah, Wis.**

NEW YORK: 122 East 42nd Street

CHICAGO: 8 South Michigan Avenue

LOS ANGELES: 510 West Sixth Street

The Map of the Nation's Business

By FRANK GREENE

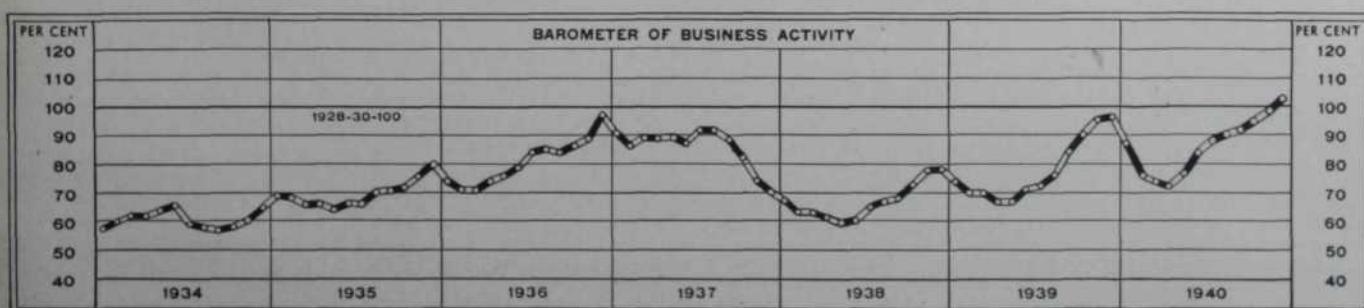


DECEMBER saw industrial output at highest levels in history. Despite holiday shutdowns, steel mill production exceeded that of November as backlogs continued to rise. Shipbuilding facilities were taxed beyond capacity and aircraft plant expansion lagged behind orders. Automobile production continued heavy with sales at best December levels for three years.

Railroad freight traffic declined less than seasonally and the cash position of carriers was materially improved at the year-end. Electricity output soared to new records. Defense construction carried engineering awards to the second largest total in history. Heaviest bond flotations since 1936 featured otherwise dull and hesitant security markets while commodity prices showed further improvement over November levels.

Winter wheat prospects forecast a bumper crop, while rising demand for consumers' goods accompanied increasing industrial income and employment. Christmas buying generally was the largest in several years.

Extension of the country wide improvement in December is registered in further lightening of the Map



Steadily expanding operating schedules in leading industries, in some instances to record levels, are reflected in the uninterrupted rise of the Barometer beginning with last May

No Business Can Escape Change

Business' own defense system is a constant array of new developments

1 • AN ILLUMINATED drawing board is now made to facilitate tracing of images from the original in stencil, spirit and gelatin duplicating processes. It has a built-in uniform light source behind a flashed opal glass. The T-square and locking clamp are built as one unit to avoid loss of parts.

2 • LIGHT weight garden hose is now made which carries approximately three-quarters the water of regular size hose yet weighs only eight pounds for 50 feet with standard couplings.

3 • A NEW rayon fiber has been developed which has a high degree of permanent crimp giving it a wool-like appearance. It can be used in rugs, carpets, upholstery, decorative fabrics. It may be dyed to brilliant clear colors even in light shades. If the crimp is lessened in processing it is said to be easily recovered.

4 • COLD forging of complicated copper parts from bar stock in a single die-forming operation without sticking in the mold is said to be possible by use of a specially developed graphite lubricant which does not affect the dimensions of parts.

5 • A NEW starter for fluorescent lamps is said to eliminate sputtering due to proper preheating of lamp cathodes; to retard blackening at the ends of lamps, and give definite accurately timed starting and re-starting. It is interchangeable with the glow-relay type of starter.

6 • A NEW lamp stand has long arms mounted and counterbalanced by springs so that it can be raised, lowered, pushed, pulled, and swung easily and without requiring adjustments to hold it in place. It has a horizontal extension of 34 inches and vertically will reach 34 inches above or 26 below the base. It is available to clamp on a table or with a stand.

7 • RACQUET strings for tennis, squash and badminton are now made of a synthetic unaffected by atmospheric changes. It has one solid strand so that threads cannot fray; does not require waxing or shellacking; does not deteriorate.

8 • THE ordinary lead pencil, made with a special binding process, is said to prevent cracking or breaking under normal writing pressures. It nevertheless has smooth writing qualities and is available in six degrees of writing hardness.

9 • FOR workmen who must wear protective glasses there are now made transparent plastic side shields which easily slip on, have light weight, give much of the advantages of goggles without obstructing vision.

10 • A NEW face shield has a grimp-bound plastic window which gives high flexibility for adjustment. It has a flexible head gear with removable long sweat band and broad elastic head band.

11 • A MOBILE fire fighting unit is built on a trailer, carries six 50 pound carbon dioxide cylinders connected to a 100 foot hose and two portable carbon dioxide cylinders and two extinguishers using water under gas pressure. The hose line has a gas shut-off valve at the nozzle.

12 • A FORMULA for processing lubricating oils is said to give a lower coefficient of friction and high viscosity index. The product is specially intended for fast-moving motors.

13 • A NOVEL safety glass has the flexible plastic interlayer extend beyond the edge of the glass so that it can be fastened securely in a frame without pressure on the glass itself. It makes possible an airtight seal, saves cracking from local stresses in the frame.

14 • A NEW 35 mm. miniature camera, of American make, is precision made for accurate work, has six interchangeable lenses from 35 mm. to 153 mm. with speeds up to F. 1.9; interchangeable backs so that different films may be changed in the camera without losing an exposure or rewinding, a precise coupled range finder, a focal plane shutter with speeds from one second to 1/1000 and bulb, and a variable power view-finder. Operating controls are designed for one hand; all dials and scales are read from the top of camera.

15 • A SYNTHETIC mill white just introduced is said to cover with one coat and dry overnight to a hard tile-like surface. It is exceptionally resistant to moisture and to repeated cleaning and its opacity permitting one-coat work on average surfaces saves material, labor, and time.



16 • A NEW camera records eye-movement in reading; is intended as a help to educators and others in diagnosing and correcting reading habits. It delivers a fully developed film.

17 • ELECTRIC motors, explosion proof, for operation near volatile flammable liquids, flammable gases, or combustible dust are now available for vertical operation. A variety of mounting flanges may be used to fit them to various machines.

18 • AN ELECTRICAL device for measuring very short periods of time—down to .001 second—is built into a small portable cabinet. Used in ballistics it can be used to determine bullet velocities in distances as short as five or ten feet. Other items from which an electrical impulse can be obtained may be clocked with less than one per cent error.

19 • A ROUND belt is now made with a steel spring as its core. Covered with braid, then rubber, it is absolutely round, does not require metal fasteners, is said to outpull and outlast leather, is simply installed.

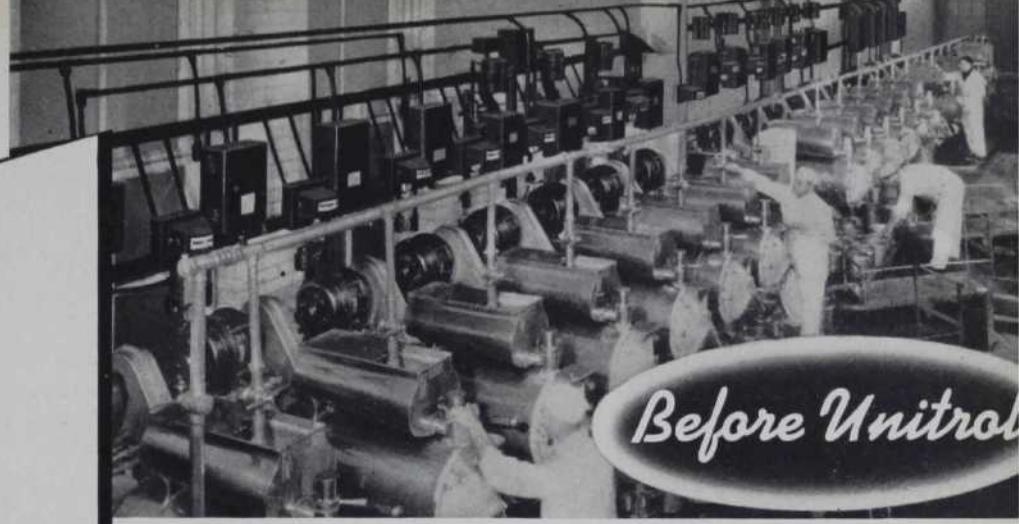
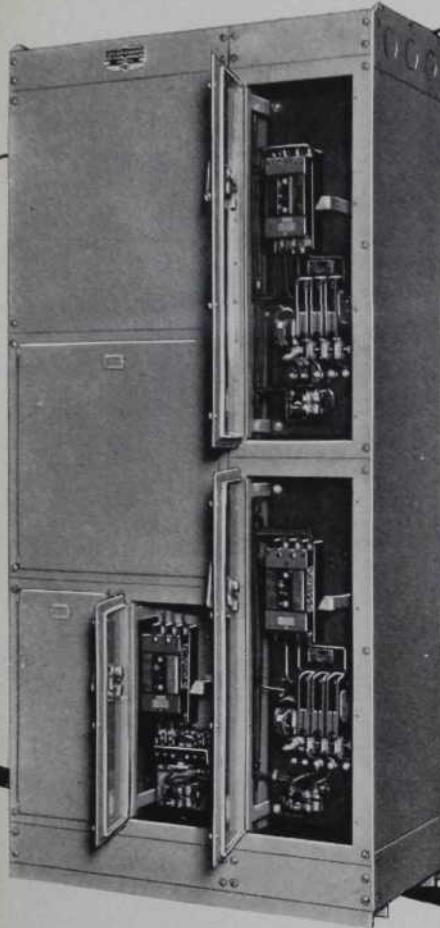
20 • A PROTECTING ring for paint cans keeps the can groove clean, provides a spout for pouring, has cross bars which provide brush wipes, brush rest and paddle holder. With the clean crown, the top may be reseated to save left over paint.

21 • A SAXOPHONE with 13 per cent more resonating surface has been developed. The effect is achieved by using discs instead of pads on the keys. Not only greater resonance, but greater tone brilliance and a more definite articulating between notes are claimed.

22 • A MODIFICATION of sprinkler fire protection uses nozzles which generate a fine spray or fog rather than a stream. It is said to be more effective with less water damage. The maker states that it is effective on some types of fire on which water could not normally be used.

—W. L. HAMMER

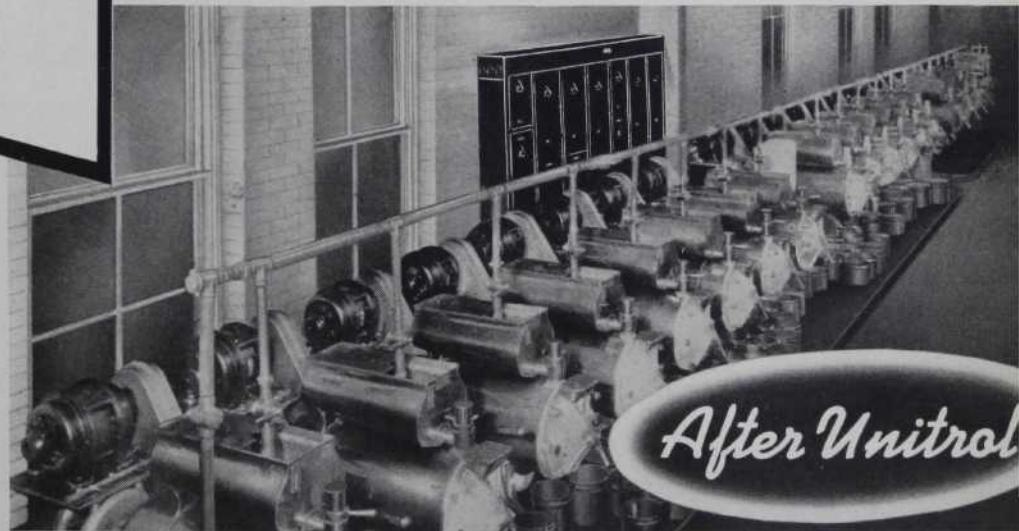
EDITOR'S NOTE—This material is gathered from the many sources to which NATION'S BUSINESS has access and from the flow of business news into our offices in Washington. Further information on any of these items can be had by writing us.



UNITROL

TRADE-MARK

a milestone of engineering progress in
MOTOR CONTROL



New *Unit* Construction...
standardized and flexible . . .
brings the desired advantages
of centralized Motor Control
within the reach of any budget.
A custom-built control center...
at an installed cost less than that
of any "home-made" substitute.

Unitrol is a new idea in Motor Control. It is a new unit-type of standardized Motor Control construction which permits all needed types of control devices to be easily organized into a complete enclosed sectionalized Motor Control Center...making it just as big or just as small as your present needs require. It is easily, quickly and economically built up, without special engineering, containing just the individual controllers, disconnect switches, and accessories you specify.

Unitrol comes to you complete . . . either with all wiring, busses, terminals and interconnections already made . . . or with provisions for wiring it "on the job". It may be changed, extended, or contracted later on, just as easily and economically as it was first built up. It saves space, time, trouble, worry, and inconvenience up and down the line; and its installed cost is less than the cost of any "home-made" substitute.

1st . . . The Unitrol Unit

The basic element of Unitrol is a simple unit mounting-frame into which any standard control device may be bolted. This unit frame has integral with it a hinged cover or door which may be blank, or arranged for either dead-front manual or push-button operation of the device enclosed.

2nd . . . The Unitrol Section

The Unitrol Section is a steel enclosure which houses and supports a group of Unitrol Units. It is constructed of standardized interchangeable members to form the sides, top and back . . . with unique provisions for bus supports, wiring troughs, conduit or duct entrances, etc.

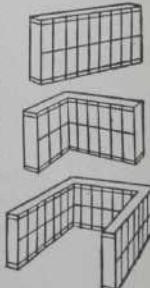


3rd . . . The Unitrol Control Center

A Unitrol Control Center consists of a grouping of Unitrol Sections fabricated into a complete sectionalized assembly and delivered ready for installation and use.

Unitrol...Fits Control to the job

Unitrol permits your control installation to be shaped at will . . . in a straight line, an L-shape, or a U-shape in which case it literally forms its own control room. In some instances, controls may be mounted back to back in the same section...resulting in a space economy hitherto undreamed of! And the individual control unit with its door frame forms a brand new time, cost, and trouble-saving "built-in" control for builders of motorized machines.



Write for this book . . . A new book . . . "Unitrol . . . the next step forward in Motor Control," tells the whole important story. Sent free by request on your business letterhead. Write for your copy today. CUTLER-HAMMER, Inc., Pioneer Electrical Manufacturers, 1251 St. Paul Avenue, Milwaukee, Wisconsin.

CUTLER-HAMMER

UNITROL

C-H

THE MODERN SECTIONALIZED CONTROL CENTER

Copyright 1940—Cutler-Hammer, Inc.



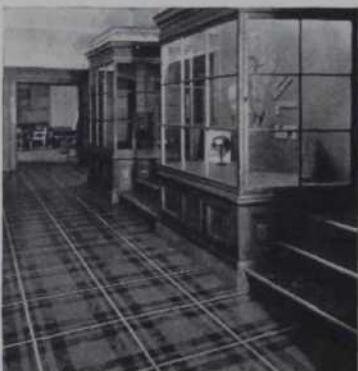
TRY THIS EYE-TEST ON YOUR BUSINESS HOME

1 LOOK AT YOUR FLOORS!

That's what your customers do every time they enter your store. And they spend more money in the stores that are up-to-the-minute and eye-appealing. A smart floor like this one in Gray's Clothing Store, Winfield, Kansas, will make your store pass the eye-test every time.



2 HAVE THEY EYE-APPEAL? It's important in a hotel entrance, too. For people are attracted to pleasant surroundings—made more pleasant with colorful and sanitary Armstrong floors. Note the appropriate floor shown here in the entrance to the Highland Room of the Stewart Hotel, San Francisco. A floor like this will pass the eye-test anywhere.



3 DO THEY ADVERTISE YOUR BUSINESS?

Your floors represent *free* advertising space... why not put them to work? Here, the City Seal of Long Beach, Calif., is inset in an Armstrong Floor in the office of Mayor Francis H. Gentry. Effects like this are easy to achieve with Armstrong floors.

SEE HOW OTHERS are making their business homes pass the eye-test with Armstrong floors. Write for our new, color-illustrated book, "FLOOR FACTS AT YOUR FINGER TIPS," which shows how shops, stores, and showrooms from coast to coast are dressing up for better business the Armstrong way. Sent free (40¢ outside U. S. A.). Armstrong Cork Company, Floor Div., 4102 Coral St., Lancaster, Pa. (Makers of cork products since 1860)

ARMSTRONG'S LINOLEUM FLOORS

Custom-Laid or Standard Designs

PLAIN • INLAID • EMBOSSED • JASPE • CORK TILE • ASPHALT TILE
RUBBER TILE • ARMSTRONG'S LINOWALL and ARMSTRONG'S QUAKER RUGS

Trade on Federal Land Now Taxed

PRIVATE business which has been largely tax-free because of location on federal property is now liable to state taxes. Recent passage of the Buck act by Congress puts the states in position to impose sales, use, and income taxes on private transactions and occupations in military posts, national parks, post offices and other federal areas. The states may levy and collect such taxes just as they do elsewhere.

While in some cases the states have been able to tax in federal areas, as when they have ceded territory to the United States and specifically retained that power, federal areas for the most part have escaped state taxes. The federal Government has title to 20.74 per cent of the country's total area. California has estimated at \$1,500,000 its annual loss in sales tax revenue from business on federal property.

The new measure, the Federation of Tax Administrators explains, permits the states to collect their taxes on purchases and sales of goods except those bought for the exclusive use of the United States. It also does away with the territorial immunity from income taxation hitherto enjoyed by persons living on federal reservations or deriving income from transactions or services performed on federal reservations. Sales tax provisions of the act are broad enough to include special taxes, such as those on cigarettes, tobacco and whiskey.

The new act also plugs a loophole in a previous measure enacted to allow the states to tax gasoline sales on federal reservations. Illinois and several other states levied their taxes on the "use" of gasoline instead of on its sale, and therefore had been unable to collect on the reservations. Illinois reported an annual loss of \$21,000 on motor fuel taxes alone on three of the ten major federal reservations in the state.

In California, a contractor on a reservation job ordered more tractors and other equipment than he needed for the job. He had them delivered on the reservation to avoid the sales tax and later took them to another part of the state for use.

In Texas, soldiers bought tax-free cigarettes from post exchanges on credit, then bootlegged them to provide themselves with cash between pay days.

A post office lobby concessionaire in Alabama refused to stamp his cigarettes as required under the cigarette tax law. Similar difficulties were experienced under the city occupational tax with professional bondsmen who transacted their business in the post office building in which the federal court was located.

Army men and civilian employees at a fort in Washington bought articles in a nearby city and had them delivered at the fort, thus escaping the state's sales tax.

In New Mexico, stores owned by white proprietors and located on Indian reservations sold goods tax free to tourists and to non-Indians in the vicinity.

Builders Balk at Six-Hour Day

ESTABLISHMENT of a six-hour day in New York City's building industry would only worsen a situation already a matter of serious concern to workers and employers alike, is the broad conclusion issuing from a survey made by the National Industrial Conference Board at instance of the Building Trades Employers' Association. Interpreting the results of the survey, a special committee of the Association gave its opinion, from which these paragraphs are quoted:

"Buildings in New York City now cost almost as much as in the prosperous days of 1926 because of the increase in wages paid to building trades workmen. Consumer demand for buildings in New York City has dropped from 1926 until private building contracts awarded in 1939 had a volume of only 20 per cent of 1926. This decrease is not surprising in the view that while a new building will cost about the same as in 1926, rents for space in such offices or apartments are now at discounts of 30 per cent or more below 1926, and first mortgage bonds in well located buildings sell from 50 to 60 cents on the dollar.

"In the face of this situation, certain labor leaders have proposed that our mechanics in the building trades enjoying an increase in purchasing power of their wages amounting to 62 per cent since 1926, shall now work only six hours per day, for which they shall receive the same daily wage that we now pay them for seven or eight hours.

"... disastrous results ... have followed and ... will become worse, from the attempt to enforce an increase of at least 15 per cent in the cost of new buildings, over the eight-hour day cost.

"... the increase of 15 per cent in cost is based upon the assumption that the mechanics will work six hours per day without overtime. Consideration should be given to the fact ... that even under an eight-hour day it was frequently impossible to complete a building at the required date without working a considerable amount of overtime, and without spending money to expedite the work in other ways. Attention ... called to the numerous actual examples of overtime situations which result under the eight-hour day, because under a six-hour day these instances will become much more expensive and involve costs largely in excess of 15 per cent.

"Under a six-hour day, an owner in most urgent need of his building sees



OPEN ACCOUNT FINANCING PROVES WORTH IN PROFITS

RESULTS

<i>Fiscal Year 5/31/39—5/31/40 . . . LOSS</i>	\$95,200.00
<i>Five Months 5/31/40—10/31/40 . . . PROFIT</i>	\$59,456.00
<i>Net Worth 5/31/40</i>	\$719,647.00
<i>Net Worth 10/31/40</i>	\$779,103.00

*COSMOS MANUFACTURING CO.
OFFICE OF THE PRESIDENT

To All Executives:

We lost \$95,200 in the fiscal year ending May 31st, 1940. We attribute this to an excessive per-unit manufacturing cost. It traces back to the fact that our financing connections could not adequately extend extra accommodation at times when money was critically needed. As a result, our production had to be speeded up to capacity when funds permitted, and slowed down to a walk when our working capital was low. This made for a "stop-and-go" production schedule, which, as every manufacturer knows, raises hob with costs.

Starting June 1st, 1940, we arranged for financing through Commercial Credit Company on the OPEN ACCOUNT plan. We received advances against receivables and inventories when and as we needed them.

With this flexible financing, we were able to level off production and cut manufacturing costs per unit.

Within five months, without any increase in sales, we showed a profit of \$59,456.00.

H.C.

If your working capital is tied up in receivables or inventories—or in bank balances accumulating to meet maturing obligations—you will find it to your advantage to investigate our OPEN ACCOUNT FINANCING service. For complete details, write for copies of "CAPITAL AT WORK" and "COMPARATIVE COSTS OF FINANCING". No obligation. Address Dept. NB.

**A fictitious name, but the facts and figures, taken from our files can be verified.*

COMMERCIAL CREDIT COMPANY

"Non-Notification" Open Account Financing

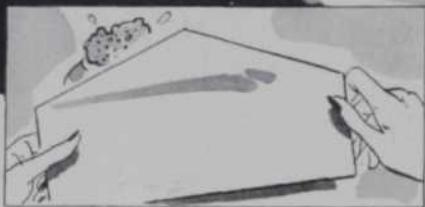
BALTIMORE

BOSTON NEW YORK CHICAGO SAN FRANCISCO LOS ANGELES PORTLAND, ORE.

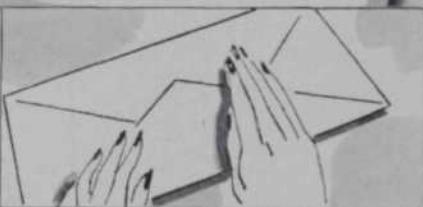
CAPITAL AND SURPLUS MORE THAN \$60,000,000

What's the best way to mail a letter?

USEFUL THINGS TO KNOW SERIES



1—Moisten envelope flap . . .



2—Seal envelope flap . . .



3—Find proper stamp . . .



4—Moisten back of stamp . . .



5—Affix stamp firmly . . .

OR: Get a Postage Meter . . . which stamps and postmarks and seals envelopes at the turn of a die . . . supplies any stamp value for any kind of mail, including parcel post . . . holds any amount of postage you want to buy—postage that can't be stolen, lost or borrowed, can't be used for anything but your business mail . . . does its own postage accounting . . . saves postage, mailing time, and worry . . . does away with ordinary stamps, stamp licking and sticking!

Metered Mail gets through the postoffice faster, too, needn't wait for postmarking or cancelling . . . The Pitney-Bowes Postage Meter costs so little, almost any office can use one . . . Call our nearest office for a demonstration—or clip the coupon!

Pitney-Bowes Postage Meter Co.
1324 Pacific St., Stamford, Conn.



Branches in principal cities. Consult your telephone directory. In Canada: Canadian Postage Meters & Machines Co. Ltd.



Pitney-Bowes Postage Meter Co.
1324 Pacific St., Stamford, Conn.

- Mail me "The Great Grimblestone Survey"
 When may we have a demonstration?

Name _____

Company _____

Address _____

his mechanics leave for home at 2:30 P.M. unless he stands ready to pay them around \$4.00 an hour to persuade them to remain on the job. This would happen, for instance, if the work had been delayed by previous bad weather. Such a situation is fantastic and particularly obnoxious to the public and other workers on an eight-hour basis, especially when it is remembered that these same building mechanics have built up their high rates of pay largely on the plea that they are unable to work full time because of weather conditions.

"Labor has attempted to make the public believe a six-hour day has already become established practice in numerous industries. This is contradicted by data showing that the six-hour day has not been generally adopted by any one of even the highly mechanized industries. For example, in the automobile industry, the average nominal week is 40 hours and the actual number of hours worked per week is 36.9.

"Therefore, in asking for a six-hour day and 30 hour week, the building trades workmen in New York City are not asking for a condition which is now found to be a general practice. They are asking the building industry to be a pioneer in establishing a universal six-hour day in its industry.

". . . return to the eight-hour day is of vital interest to our industry and to the public. It becomes even more vital in view of the tremendous national effort to build up our war defenses speedily. Time and costs have become two factors in this work, that can make or break our nation in its work of defense. The short work day in building operations is unquestionably a large factor for delay and cost increase, particularly in view of the rapidly gaining shortage of building mechanics in areas where large emergency projects are under way."

The Family Airplane Rounds the Corner

(Continued from page 46)
istics, favorable enough, too, to compete with the automobile.

With this much progress already forming a sound and tried foundation, the added impetus in the form of huge manufacturing facilities, large supplies of skilled aircraft labor and the demand which is certain to stem from the thousands of student pilots trained by the Government, plus the military pilots, is certainly a force to be reckoned with. That's for the very near future, but right now it is not fanciful even to speak of flying "drummers," traveling salesmen with samples covering four to five times the ground their "ancient" counterparts covered, because they already exist.

Commercial travelers who own their own planes or who fly "company" planes

are numerous and their number is growing. This is another avenue for expanding sales of light planes and it is noteworthy that here, too, the early history of the automobile again is paralleled—first cars were bought for pleasure or "sport"; then came the wider pleasure-business use.

Of course most of these business men are beyond the student age, but there is nothing to the ordinary routine of flight which practically anyone, young or old, who is competent to drive an automobile cannot master in a few hours. Solo flights (flying a plane unaccompanied by instructor) have been made after eight hours of instruction, some in five. Skill in navigation and in the routine of cross country flying can be attained in further studies consuming as many additional hours as the pilot pleases to spend. The navigation technique of the commercial transport pilots, however, is no more necessary to the civilian pilot than is the experience of a seafaring captain to the private yachtsman.

Enthusiastic for aviation

IT IS hard to estimate the importance to the future growth of private aviation of the Civilian Pilot Training Program. The knowledge of flying which daily is being imparted to thousands of Americans has some of the characteristics of a rolling snowball in that its effect is cumulative. It is no accident that today automobile dealers rarely have to teach a buyer how to drive. That knowledge has been handed down from parent to child, from older brother to sister, and from friend to friend. It is reasonable to assume that the same will be true in flying.

About three years ago only 17,700 people held active civilian pilot certificates. Latest figures show more than 41,000 active pilots. Government authorities estimate that by the fall of 1941, the number will have grown to 100,000.

Standards for light plane construction are being constantly improved. Years ago the flivver ship was a haphazard affair, sometimes built in a backyard. It flew by the grace of God and some baling wire. Today, before a light plane can be sold commercially, it must pass the series of strict Civil Aeronautics Administration tests. A stamp of approval is given and this stamp has done much to allay fears as to safety. Illustrating the strides being made toward "foolproof" manufacture is the fact that, late in 1940, the Government licensed a plane which was certified as "characteristically incapable of spinning."

Other improvements are coming off the drafting board, but most important is the technique of mass production, dictated by the national emergency. Light plane manufacture is being standardized and a standard model in which are inherent all of the principal safety and comfort features is today no dream of the future, but a reality. Peace and the natural desire to forge ahead rapidly and repair all the damage of the war-torn years will find the small airplane ready to do for the national economy what the automobile did after the World War: open up new avenues of employment and advance the welfare of the entire country.

Good News

for Pennsylvania

can be Good News for You

Good news for Pennsylvania can be good news for you . . . whether you are in Pennsylvania or not. If you are not here now, the steady stream of good news from Pennsylvania may mean your company should have a plant or a branch in the midst of all this prosperity.

- 1 • PENNSYLVANIANS' annual income is up a third of a billion dollars a year, in the latest reports. This is a rate of gain 50% more than the national average rate of gain.
- 2 • A RUBBER COMPANY has just completed a \$1,500,000 addition which increases its capacity here 50%.
- 3 • A CHEMICAL COMPANY recently selected Chester, Pa., for its new \$1,500,000 water gas and light oil plant because of Pennsylvania's power and deepwater facilities.
- 4 • A DYESTUFFS company at Lock Haven, Pa., is spending \$250,000 to extend its facilities.
- 5 • SEVERAL HUNDRED THOUSAND more Pennsylvanians had full-time employment at the end of 1940 than at the beginning. Unemployment relief costs are down \$5,000,000 a month in the last 18 months.
- 6 • A SHIPBUILDING company near Philadelphia is spending \$1,000,000 to re-tool its plant as part of a \$10,000,000 rebuilding program.
- 7 • AN ADDITION to a steam turbine plant at Lester, Pa., will cost \$4,500,000 for construction and \$5,000,000 for machine tools and other equipment.
- 8 • HOSIERY, dress and shirt manufacturing companies are moving into Pennsylvania and providing jobs for hundreds of Pennsylvanians.
- 9 • ONE STEEL company is putting in \$2,000,000 of new manufacturing facilities at its plant in Homestead, Pa., and another is carrying on a \$2,250,000 expansion at Midland, Pa. A third is starting an improvement program at Sharon, Pa., which will run over \$600,000. A foundry and machine company in West Homestead, Pa., is about to erect a new building to house \$1,680,000 of new machinery.
- 10 • AN ELECTRIC COMPANY in Chester, Pa., which just finished a \$7,000,000 extension of its generating facilities, has started upon another to cost \$4,600,000.
- 11 • A COMPANY manufacturing gypsum products has purchased a plant at Bellefonte, Pa., in a program which will eventually mean the expenditure of \$1,000,000.
- 12 • A SURVEY by a national industrial magazine showed that in a six months' period in 1940 when heavy construction in the nation was dropping 11%, it was increasing 26% in Pennsylvania.

The Department of Commerce, Harrisburg, Pa., will be glad to make a report for you on what you can expect in Pennsylvania.

Pennsylvania

where your business can expand



ARTHUR H. JAMES, Governor • RICHARD P. BROWN, Secretary of Commerce



Radio Answers the Call of Total Defense

With characteristic speed, radio today is responding to the call of national defense. Enrolled to serve the public interest and fortify the Nation's invisible life-lines of communication are: Research, Engineering, Manufacturing, Broadcasting, International Circuits, Ship-and-Shore Stations. In 1919 the Radio Corporation of America was organized as an American-owned,

American-controlled radio company. RCA has established a world-wide communications system, independent of all foreign interests, and has pioneered in the creation and development of a new art and a new industry. Today, each of its services is equipped and ready for action in the first line of America's total defense on land, sea, and in the air.

RCA CALLS THE ROLL OF ITS SERVICES TO THE NATION:

WORLD-WIDE COMMUNICATIONS

Vital to defense and commerce, RCA operates 24-hour direct communication service to 43 countries. This service avoids the censorship, errors, and delays which might occur at relay points. The Nation is protected against the loss of overseas communications through the cutting of submarine cables in war-time. Supplementing these globe-girdling channels, RCA operates a domestic radiotelegraph system that links 12 key cities in the United States.

MARINE COMMUNICATIONS

Life and property at sea are guarded by modern radio coastal stations and radio-equipped ships. Eighteen hundred American ships are equipped with RCA apparatus. The shore-lines of the United States are fringed with radio beacon transmitters to guide the fleet and shipping in American waters. American ships do not have to depend upon foreign-controlled means of communication to send messages home.



RADIO

BROADCASTING

RCA pioneered in establishing the first coast-to-coast network of broadcasting. The National Broadcasting Company, formed in 1926, today serves an American radio audience through 50,000,000 receiving sets. NBC provides these listeners with serious and popular music, news and information, drama and education, public forums and religious services. Under the American system of broadcasting, the finest and most extensive variety of programs to be had anywhere in the world is free to the listening public. *The richest man cannot buy what the poorest man gets free by radio.*

The broadcasting service of NBC is also maintained internationally, by short wave, and helps to strengthen good-will and cultural and economic relations between the Americas, and with other parts of the world.

An informed public opinion, promoted by a free press and a free system of broadcasting, is an important national asset in total defense.

MANUFACTURING

The RCA Manufacturing Company operates five large plants, strategically located at Camden and Harrison, N.J., Indianapolis and Bloomington, Ind., and Hollywood, Calif. Within the year the company has invested millions of dollars in expansion to facilitate production and rapid filling of orders from the Army and Navy. Machinery is geared for national defense in addition to providing for normal requirements of the public.

RESEARCH AND ENGINEERING

Through science and research, the RCA Laboratories are enrolled in national defense. Research in electronics, wave propagation, television, facsimile, acoustics, optics, and in other fields has opened new services and extended the scope of existing services, both commercial and military.

No longer must an aviator "just look to the ground" to find his way to a target or to his base. He may fly and land "blind" by radio. The electron microscope, a product of

RCA Laboratories, is a new means to help protect the national welfare as it opens new horizons for bacteriologist, chemist, physicist and industrialist. In these and many other ways, peace-time radio research has built new bulwarks of defense for our Nation.

INVENTIONS AND THEIR USE

RCA licenses many manufacturers to use its inventions and patents. By making them widely available, RCA has helped to create an industry as well as an art.

Through this licensing policy the radio industry has access to results of the research of RCA Laboratories. In this way, competition has been stimulated, and numerous sources of supply opened to the public and the Government.

TRAINING

More than 1,100 students are enrolled in the completely equipped schools of the RCA Institutes, Inc., in New York and Chicago. From this enrollment and from graduates of the Institutes, the United States can enlist the services of trained men in all branches of radio, from ship operators to service men. Scientists and engineers associated with RCA present and publish hundreds of scientific papers each year as aids to others interested in radio. For those who follow technical developments of the art, RCA Review, a quarterly journal, prints the latest scientific reports on progress in radio.

EMPLOYEES

Labor relations between RCA and its employees are excellent. Employment in the RCA organization in 1940 increased from 22,000 to 27,000 employees. Principal officers and many employees of RCA are members of the Army and Navy Reserves.

For 21 years the pioneering efforts and services of RCA have safeguarded American preeminence in radio. ***RCA continues to serve the public interest and is fully prepared and ready to carry on in the first line of total defense!***

CORPORATION of AMERICA

RADIO CITY • NEW YORK

The Services of RCA:

RCA MANUFACTURING COMPANY, INC.
NATIONAL BROADCASTING COMPANY, INC.

RADIOMARINE CORPORATION OF AMERICA
R. C. A. COMMUNICATIONS, INC.

RCA LABORATORIES
RCA INSTITUTES, INC.

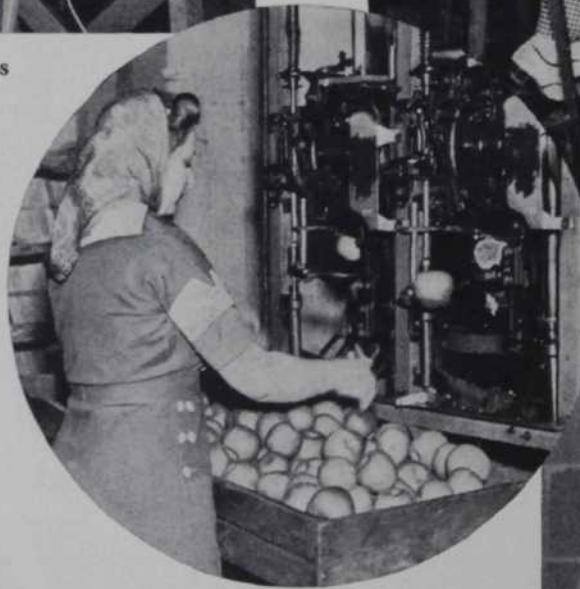
Machines Help Vegetable Markets



Cabbage shredder is new development



X-ray machines used to examine fruit. Faulty specimens discarded by pressing a lever



Operator feeds apples into machine for peeling and slicing



Tomatoes are ripened under artificial weather conditions

HAND-TAILORED weather, coupled with new tools of science, are bringing about important changes in the handling and marketing of fruits and vegetables.

In the country's newest food terminals, for instance, are specially designed rooms where the ripening of bananas and tomatoes may be speeded up or retarded in accordance with market demands.

Bananas are now ripened by the Turkish bath system. The ripening rooms are approximately 16 by 21 feet of clay tile and concrete construction with six-inch cork insulated doors. Suspended from 410 hooks in the ceilings are strands of rope, half of them long, the remainder short so that, when the green bunches are fastened to them, the entire area of the room is filled.

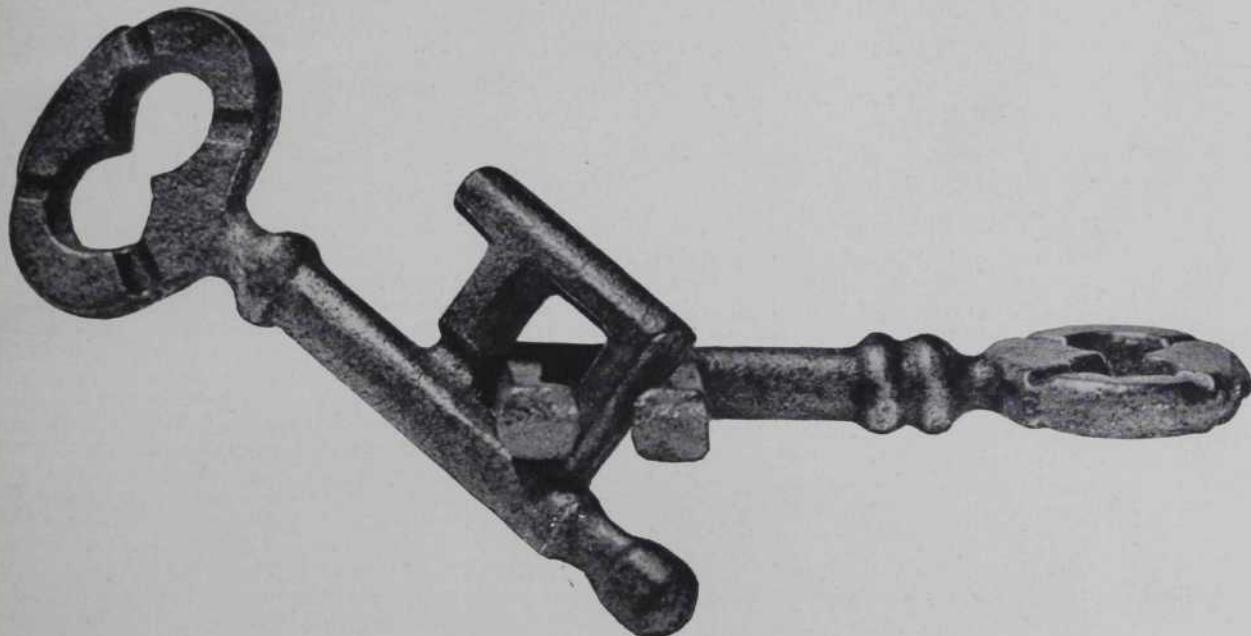
Tropical humidity is provided by covering the concrete floor with a quarter of an inch of water. A gas heating unit with blower fan arrangement is turned on, the temperature being set at 72 degrees. Under such conditions, bananas can be ripened in approximately four days though, after the first day, the temperature is brought down gradually, first to 65 degrees, then 60 degrees for the final 24 hours.

Tomatoes grown in the West for eastern dinner tables arrive in much better condition if they're picked and shipped green. Nature is outwitted at her own game in the system developed by the Pisciotta Company of Kansas City, which handles thousands of pounds of tomatoes weekly. It is similar to the banana ripen-

ing system except that overhead mist type sprays are used instead of flooding the floor.

X-ray machines are now being widely used in examining citrus fruits before shipping and storing.

The housewife in search of the ingredients of a vegetable stew or soup, or a fresh vegetable salad no longer has to buy a half dozen different vegetables. Produce dealers have perfected dicing and shredding machines for the packing of assorted, ready-to-use vegetables in cellophane bags. Likewise, peeled and sliced apples are now being sold to pie companies, hotels and restaurants, thanks to a new device that does the major portion of the work mechanically. The apples are placed on metal cups by the operator, peeled automatically and then deposited on the inspection board where any brown spots are trimmed off by hand. The washing and slicing is done electrically and the apples are ready to be tucked between crusts.—JAMES MCQUEENY



a costly game in business

If you are puzzled . . . if you aren't sure . . . about air conditioning or refrigeration . . . whose to select . . . how much you ought to pay for it . . . whether it will do what you hope for . . . here's the key to the problem.

Look to York for your answers, for York engineers are brought up on the rule that every York job must profit the user. It is to 56 years of this profit-minded engineering that York owes its position of leadership today.

Cuts Costs for Bond Bread

The General Baking Company, for example, famous from coast to coast as the Bond Bread bakers, find York equipment has helped to safeguard both profits and product. York air condi-

tioning of dough rooms, York equipment for water cooling and ingredient storage in 27 great baking plants have cut costs many thousands of dollars, says General Baking Company, and have insured *uniformity* in the high quality the nation's housewives expect in Bond Bread.

Why not take advantage of the experience gained in more than 150,000 engineered air conditioning and refrigeration installations, make use of an organization trained to see your problem from your viewpoint?

York Ice Machinery Corporation, York, Penna. Branches and distributors throughout the world.



YORK REFRIGERATION AND AIR CONDITIONING

"Headquarters for Mechanical Cooling Since 1885"

A FEW OF THE MANY NATIONALLY-KNOWN USERS OF YORK EQUIPMENT—American Air Lines • Armour • A. & P. • B. & O. R. R. • Bethlehem Shipbuilding • Canada Dry • Coca-Cola • Curtiss-Wright • du Pont • Eastman Kodak • Firestone • Ford • General Baking • General Foods • General Motors • Goodyear • Norton Company • Pabst Brewing • Paramount Pictures • Pennsylvania R. R. • Procter & Gamble • Shell Oil • SKF Industries • Socony-Vacuum • Swift • Texas Company • United Fruit • U. S. Army • U. S. Navy • Woolworth

83

76

44

55

93

83

79

87

TO GET THINGS DONE IN '41



Business that's getting things done in '41 has Victor Adding Machines spotted in key office positions. Retail merchants, professional men keep Victors at their elbow for quick, accurate figuring and record keeping. Victor portables—mobile, sturdily built, easily operated—are always handy when they're needed, where they're needed, speeding work to finished form on time. Victor, 23 years a leader in adding machine improvements, gives you a choice of six "straight" portable adders in 10-key or full keyboard; two portables that add and subtract; thirteen Electrics and hand-operated models. All priced to fit your budget, starting at . . .

\$
47.50



Get a Victor portable for your personal affairs—to figure income tax—for other tedious home work. Take it with you on business trips in its attractive carrying case. It costs no more than an ordinary portable typewriter. See your Victor representative today or write *Victor Adding Machine Co., Dept. N-2, 3900 N. Rockwell St., Chicago, Illinois.*

VICTOR
ADDING MACHINES

MEMO... for Busy Readers

1 • New street cars give better service 2 • What increased wages bought last year 3 • Fernandina appraises its four year campaign 4 • Discipline by labor unions

29

37

31

27

63

44

37

23

87

22

29

39

46

58

60

21

84

66

83

10

20

33

95

57

68

21

93

45

17

22

34

76

25

REJUVENATION of New Type Cars Aid City Transit

street railway systems in the United States is substantiated by operation of 1,200 modern streamline cars which in December had completed a total of 120,000,000 miles. New cars have encouraged wider use of street railway service by proving they can maintain high speed with safety. Streamliners have speeded up streetcar traffic by ten to 15 per cent.

Type of new cars is known as "P.C.", because they were standardized by the Electric Railway Presidents' Conference Committee. Through the past six years these high speed streamliners have been replacing older cars in 13 cities, including Pittsburgh, Chicago, St. Louis, Washington, and Toronto, Canada. Pittsburgh now leads with more than 300. At year's end Kansas City had 24 on order.

Along with safe speed distinction, new cars also feature quietness and freedom from vibration through use of cushioned wheels and rubber springs, smooth starting and stopping, superior illumination, adequate ventilation and heating. Free running speed of 42 miles an hour can be maintained. Acceleration and braking rate is 4.75 miles per hour per second. Three kinds of brakes are provided—dynamic, air and magnetic.

**Where Dollars
Went in 1940**

WHAT Americans did in 1940 with their current incomes is suggested by a survey of spending for the first 11 months. Up to December 1, consumers had bought 1,000,000,000 gallons more gasoline, 600,000 more automobiles, 25 per cent more entertainment, 13,000,000 gallons more liquor, and 1,000,000,000 more cigarettes than in the comparable period in 1939.

Soft drink manufacturers were reporting new sales records; candy sales were up. Out of more pay envelopes and fatter pay envelopes, workers had bought 25 per cent more theater tickets and admissions to other amusements; 25 per cent more radios and radio equipment; many more firearms and much more ammunition.

In the burst of self-indulgence in pleasures and luxuries, thrift was not

entirely neglected, assures The Northwestern National Life Insurance Company. Total savings in banks were more than \$700,000,000 higher or 2½ per cent above 1939 figure; residential building, chiefly small homes, was well ahead; sales of ordinary life insurance were up only approximately one per cent, but industrial insurance, bought chiefly by wage earners and low income groups, expanded six per cent in sales volume for first ten months of 1940 compared with corresponding period of 1939.

Consideration of defense activities as economic stimulants moved the company to cap its conclusions with this philosophical comment:

It is a natural and human phenomenon, after years of lean pay envelopes or no employment at all, for families in the first flush of increased income to "go for a joy ride" by indulging themselves in pleasures and luxuries which they have hitherto had to limit or deprive themselves of completely. "Silk shirt" era of last World War prosperity was an example. When easier money conditions become settled and remain for a time, family spending usually comes into balance again.

**A City Looks
At Its Ledger**

EXPERIENCE OF Fernandina, Fla., in four year campaign for city's general welfare and provision of market for local timber offers eloquent object lesson in results.

On plus side were construction of two large pulp and paper plants at cost of \$8,550,000; increases of 150 per cent in local annual pay rolls, 20 per cent in property values, 30 per cent in tax collections, and 33 per cent in population—from 3,000 to more than 4,000; decrease of 95 per cent in unemployment. Farmers and timber owners in the area are profitably disposing of their slash pine.

On unfavorable side, could be listed city's additional financial burdens. Construction of new streets, docks, and drainage facilities, and development of mosquito control projects, made necessary issuance of \$175,000 in bonds. Figure does not include bond issue of \$50,000 to pay major part of a \$65,000 campaign fee charged by promoter on basis of percentage of capital invested.

Many new houses have been built, but 56 per cent of all homes in Fernandina

are tax exempt under \$5,000 homestead exemption law. City officials anticipated that taxes on additional 25 per cent of homes will be delinquent, leaving only 19 per cent of homes contributing to city's operating costs. The 81 per cent tax exempt or delinquent represent approximately 40 per cent of city's assessed valuation.

In addition, the two paper mills occupying one-fourth of community's total land area are exempt from taxation until 1948.

In effort to meet these financial problems, city now is levying limit of 15 mills for operation expenses, on 100 per cent valuation. Permit fees for building, plumbing and electrical inspection have been established. Sewer rental and garbage collection charges are in view. City officials say that with most favorable collection experience these new sources of revenue will not prevent increase in tax rate, and expect to request 1941 legislature to increase the millage limit to at least 30 mills.

Self-Rule of Labor Unions

SELF-Government of organized workers is suggestively exemplified by fact that United Mine Workers in one year, disciplined 4,031 members, with expulsions amounting to 150,117 years, and fines totalling \$387,205, that by-laws of American Federation of Musicians authorize a fine of "not less than \$10 nor more than \$5,000" where no other provision is made.

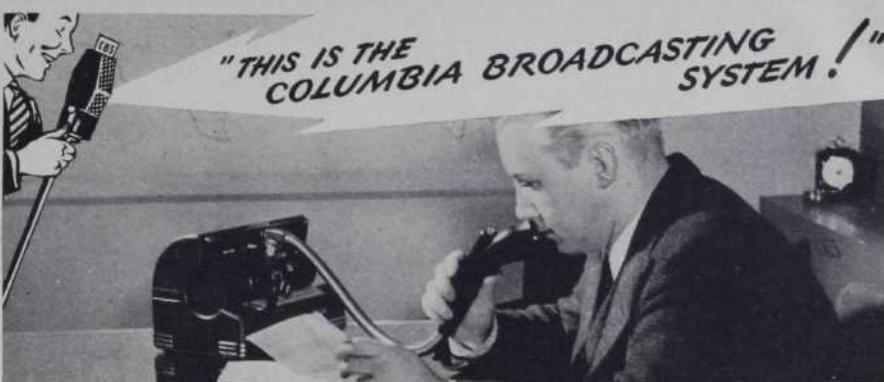
Union members can be disciplined for offenses as diversified as slandering officers, disclosing union secrets, creating dissension in the union, "wrongfully" condemning any decision rendered by any officer of the union, or attending meetings other than regular union meetings to discuss union affairs.

Customary practice is to permit hearing board to fix period of suspension without any set penalties provided in union's constitution or by-laws. As to fines, similarly, few constitutions provide for specified fines, although maximum fines are occasionally set.

As far back as 1842, power of a union to impose disciplinary penalties for infraction of union rules was upheld in Massachusetts, says Neil Chamberlain, Ohio State University economist, writing in the *Brooklyn Law Review*. This holding has been widely followed. In a 1927 case, the judge, following this theory, asserted:

Membership in a labor union is voluntary. Every workingman has the right to belong to a labor organization if he chooses. He has an equal right to refuse to belong.

Revoking the charter of a local by parent union is permitted uniformly. Reason for revocation varies from arbitrary revocation to "improper" conduct. Customarily, when a local's charter is revoked, its funds and assets become property of parent organization. It is a usual practice, the author notes, to demand that a member exhaust his remedies within the union before resorting to court action, on penalty of suspension or expulsion.



Over 1700 CBS people team up to bring you the latest news, entertainment . . . Frank Stanton, Director of Research, marshalls radio facts and figures—pours data, detail, statistics into his Ediphone to keep his mind free for analyses, executive matters—"And in these times I keep an Ediphone at home," he says.



Henry B. Kranz "eavesdrops" on Berlin while special Ediphones record each word. Should some big event break, the translated news is flashed to CBS's 122 affiliated stations. (Speed and efficiency are yours too, with an Ediphone.)

NEWS FLASH!

Talk your work away, too! There's 60 minutes more executive time per day when you say it to the

Ediphone
EDISON VOICEWRITER

Try one—free! Phone "Ediphone" (your city). Write Dept. N2, Thomas A. Edison, Inc., West Orange, N. J., or Thomas A. Edison of Canada, Ltd., 610 Bay Street, Toronto,

Kimpak

REG. U. S. PAT. OFF. & TRADE MARKS REGISTERED
KIMBERLY-CLARK CORPORATION
CREPE WADDING

**beautifies as it protects
your product in transit**



Showing how Lightfoot Shultz Co. uses KIMPAC* on its beautiful American Regency soap package.

The soft, resilient "shock absorber" action of KIMPAC gives your product maximum protection against breakage and damage in transit . . . adds the sales advantage of attractiveness...saves time and waste in your shipping room. That's a winning combination.

You buy KIMPAC in rolls, sheets and pads of the thickness and size that meet your needs exactly. KIMPAC is inexpensive, light-weight, flexible . . . as easy to use as a piece of string. Since KIMPAC absorbs 16 times its own weight in moisture, it more than meets government postal regulations regarding shipping of liquids. . . . Don't delay. Mail coupon for new KIMPAC portfolio and for free samples for testing.

*Reg. U. S. & Can. Pat. Office
Copyright 1941—Kimberly-Clark Corp.

FREE! New Kimpak Portfolio

KIMBERLY-CLARK
CORPORATION

Neenah, Wisconsin

Address nearest sales office:
122 E. 42nd St., New York
City; 8 S. Michigan Ave.,
Chicago; 510 W. Sixth St., Los Angeles.

Please send me Portfolio of KIMPAC. NB-2-41



Company _____

Address _____

Attention of: _____

Our product is _____

They Put a Gun on His Shoulder

(Continued from page 32)
know that the part itself is absolutely correct.

To determine this, it becomes necessary to build a couple of tanks by hand. This will take about three months' time.

The engineering design of this link is finally found to be correct and the problem of production now goes into the tool designer's hands.

This man will make the drawings for the equipment and then he and about five skilled shop mechanics will work full time for approximately four months before the equipment is ready for its first test.

If the tool designer is a properly trained and accurate workman, he and his group of skilled shop men will have a set of equipment which will, eventually, be able to produce the chain link in the allotted time, but, as yet, it will be full of bugs. Another month or six weeks will pass before they are able to make it fully efficient.

On the other hand, should he be improperly trained or careless it is just too bad. The chances are that another more capable man must finally be called onto the job and that another three or four months must be spent before the equipment works.

We will not even guess how many dollars will be wasted. It will run into four figures at least.

Thus we find that a minimum period of about eight months will pass before we are ready to produce that one little chain link efficiently.

Tooling up is complicated

ALL THIS work is necessary to make one small part of a tank. A tank consists of hundreds of other parts all of which must be tooled in a like manner. Some of those tools may cost only \$100. Others may cost \$20,000 or more.

Tanks are only one item of warfare. Planes, motors, trucks, ships, guns, shells and what not, all must be tooled with like precision.

John Jones was one of those thoroughly trained, efficient, careful workmen. Whenever John designed tools for the Liberty Motor they produced as John had planned it.

Near the end of 1917 John and his wife found out that they were not as ideally mated as they had thought. The result was a divorce. John was a single man again and the draft board decided that he could no longer claim exemption on the grounds of dependency.

They put a gun on his shoulder.

All pleas and arguments that John was far more valuable in the shop failed to move them. John simply had to go to camp and train to become a soldier.

I'll bet that Kaiser Bill wore a broad grin when he heard about it. He knew that now he wouldn't hear so many Liberty Motors droning overhead with their loads of bombs.

The irony was that John never left this country. He spent the rest of his war

days in a training camp. John was little help to his country as a soldier, but he was a valuable tool designer. His pencil was far more deadly than his gun!

We will call our second man Sam Brown.

Sam was standing out in the shop in front of the big Steinle when they reached down, plucked him out of his overalls and dressed him in khaki.

Those Steinles were a real he-man job. They were those big turret lathes which hogged the stock off the Liberty Motor cylinder forgings; which rounded out that odd combustion dome; which whittled out the pilot diameter and which roughed out the crankcase flange.

Heavy but skilful work

THE Liberty Motor cylinders were husky pieces of forged steel when they entered the door of the shop. There was a lot of steel to be ripped off before they became a finished product. They weighed but a fraction of their original selves by the time they were ready to assemble onto the crankcase. The Steinles ripped off the greater portion of this stock. The boring bars ripped and snorted as they tore the steel from the inner walls; smoke and fire flew as the high speed tool bits tore through the steel on the outside.

It was a backbreaking job to lift those chunks of forged steel from the floor to the gaping jaws of those chucks and fixtures. It required physical strength to tighten the jaws and draw bolts so that the cylinder would not go sailing through the shop when those powerful tools ripped into it. It required skill to set those feeds and speeds to the proper point; to know how to grind and set those tool bits when they became dull.

It required the sensitive touch of a skilled workman to feel those micrometers and gauges and to know that those sizes were correct to the one-thousandth of an inch.

Sam had what it took. He had all of those things and more. He was a real production workman of the kind who gets results that count.

Sam was right up there in the draft. He was just the right age; he was a perfect physical specimen and he had no dependents.

The only thing that he did have, and which should have eliminated him from the draft, was that knack of getting the job done right.

Fate was kind enough not to call him away in those earliest days of the draft. His number was one of the last to come up.

Thus Sam was able to stand up before those Steinles in the days when there were still plenty of bugs in the job and when sound intelligence was needed to dig them out.

Sam was on the job until late in the summer of 1917 and until a few satisfactory cylinders began to roll off the Steinle line. I have no idea how many suggestions Sam made for getting those

troubles whipped, but I do know he made plenty.

Finally they called Sam away and put a gun on his shoulder.

Kaiser Bill surely wore a big smile when he heard about that one. He knew all about those weeks of delay which Sam's absence would create. He knew that we would not be getting out Liberty Motors nearly as fast. He knew that it meant the sacrifice of more than one infantryman's life—a life improperly protected by the lack of planes overhead.

Sam's disappearance did create a delay and a mighty bad one. By then men were becoming really scarce, so women were assigned to those Steinles. They were real huskies, Amazons; they had to be or they never could have wrestled those Liberty Motor cylinder forgings.

Those women had never before seen the inside of a machine shop and they soon discovered that handling a Steinle lathe was a far call from slinging pots and pans.

Weeks were spent in teaching them the fundamentals of those Steinles and, during those weeks, production dropped to zero. More weeks passed before they came up to one-fourth of Sam's production and, in all the time they operated the Steinles, they never did exceed one-half of Sam's output.

Eventually it was found necessary to take men from other jobs to handle the Steinles, the job was simply too heavy for women. All this new training did not help production. Liberty Motors were merely dribbling through.

Eventually Sam was sent across. I lost track of him. I never heard whether or not Sam brought down any enemy with his gun but I know that he was doing an awful lot of damage to them when that greasy paw of his was guiding the carriage of that Steinle lathe.

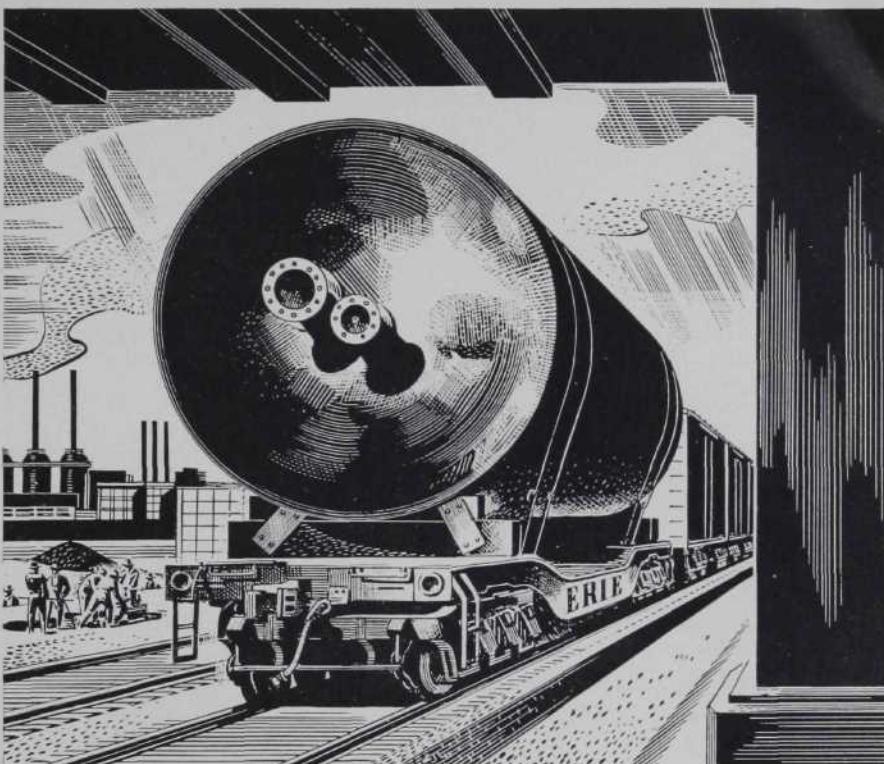
Every industry in the United States which will be called upon to aid in the defense program has its share of John Joneses and Sam Browns. They are the younger men of the draft age who have been sufficiently ambitious to fit themselves for the various skilled and specialized jobs. Those men will be far more valuable in industry than they ever can be in the army.

If we use our heads instead of our emotions, we will study the qualifications of each man thoroughly and we will not misplace him as we did in 1917-18.

We will give industry a chance to do its part.

A Club for Foods

A FOOD of the Month Club is the newest plan for stimulating jaded appetites. Providence, R. I., is being used as a test city for the idea. To introduce new products, housewives are offered a monthly surprise package containing from five to seven new or exotic foods. The price is \$1.50 a month for the first two months, thereafter 60 cents a month. Cooperating manufacturers supply the foods to the Club at special introductory prices, somewhat as publishers support the book clubs.



We're Broad at the Beam —AND PROUD OF IT!

- At one time the Erie was a broad-gauge railroad. When it was changed to standard gauge, the extra-high, extra-wide clearances were maintained. Today, the Erie has the highest, widest clearances in the East, can handle unusual loads that would seem too big for rails.

But here's what's more important. We can deliver *all* your shipments—large or small—quickly, safely. And we know we can save you money in the bargain! Call the Erie Agent—check with him the many special facilities and services which have made Erie "First in Freight." Then ship Erie and get their benefit.

TRY ERIE PASSENGER SERVICE FOR REAL TRAVEL COMFORT

On your next trip between Chicago and New York, buy an Erie ticket. Enjoy a smooth, restful ride over the most carefully tended tracks. Modern air-conditioned equipment.



RAILROAD

THE HEAVY DUTY RAILROAD

You Can Get It on Wheels!

(Continued from page 29)
capacity to fill existing government orders.

In the mobile, shifting pattern of national life that sprawls 3,000 miles across a continent, the trailer is finding new uses every year.

Missionaries, clergymen and priests use them to spread the gospel. Two missionaries who tour the Appalachian region live and travel in a trailer-chapel which has both an altar and a public address system. The Army is considering the use of trailer coaches for chaplains.

Owners of one horse racing stable couple trailer vans behind their own cars and haul their horses from track to track. At least one famous dance band travels from engagement to engagement and even rehearses en route, in its own trailer. Its leader reports the method a great success, and a saving in overhead of more than half.

Roving commercial photographers find them handy and of course the trailer gentry has its share of fortune tellers,

spirit mediums and medicine show artists.

Hundreds of small, travelling shows and caravans that tour the rural areas have taken to trailers and gained a new lease on life. Trucks do the heaviest hauling but the ubiquitous trailer is the real heart of the show. Some of them carry the side-shows and the larger booths. They are drawn up along the raucous midway, their sides are let down, steps are moved into place, and they are ready for business. Another trailer is the cook tent, still another the mobile power plant. Manager and artists move with the show, living in their own house trailers.

If you should suddenly remember that you forgot to tell your wife you would be late for supper while you're visiting one of these shows or taking in a county fair, you can usually find a trailer-telephone booth close by. A number of Bell System members have put such mobile units into service, while telegraph companies park their own rolling telegraph offices at highway intersections along

main commuters' routes where in about two shakes you can park your car, send a telegram, and drive on.

Michigan's state department of agriculture has fitted up a number of trailer-laboratories for testing cattle for Bang's disease. Illinois and Nebraska highway departments use them to check gasoline sold at service stations. Mineola, L. I., has a rolling police station. Towed by a radio patrol car, it is a miniature crime detection laboratory. Public circulating libraries are arranged in trailers in many parts of the South, and can provide door-to-door service.

An aid to rural health

THE lack of dentists and doctors in small towns has long been a serious problem in rural areas. Now dentists are building up practices in small towns—not in one town but in several—with the help of modern, fully equipped offices that can be towed behind their cars. One such trailer that swings in a 23-mile circuit around Albert Lea, Minn., is air conditioned and includes a waiting room, operating room, and laboratory.

Free dental clinics on wheels are also operating in some localities, while the Public Health Service is going in extensively for mobile medical clinics.

Trailers have found important jobs in the electric power industry. A substation failure used to mean real trouble. Consumers beyond the substation went for hours, sometimes for days, without light and power, while repairs were being made. Now in Philadelphia and several other cities, a report of a substation failure is the signal for a heavy trailer to be rolled out. Towed to the scene of the trouble and hooked onto the line, the trailer becomes a self-contained, portable substation, and keeps the consumers happy until the permanent unit has been repaired.

Hospitals on wheels are scarcely a novelty, and their proven usefulness for certain kinds of work makes it almost certain that they will become common. The California Forestry Medical Corps operates one for emergency work in connection with forest fires, earthquakes, airplane crashes—anything that causes numbers of people to get hurt without first considering whether a hospital is handy. It has folding cots, an operating table, sterilizers and other essential equipment. The Montgomery County (Ohio) chapter of the American Red Cross has a similar mobile unit. Equipped with a police radio, it rushes to every major fire reported in the region of Dayton.

The most elaborate mobile hospital unit so far developed was used by the U. S. Army Medical Corps in connection with the recent maneuvers at Camp Beauregard, La. It is a complete modern hospital, travelling in 15 trailers. An operating room, sterilizing chamber, mobile kitchen, and electric power plant are included. When set up, there is a canvas

War's effect on competition



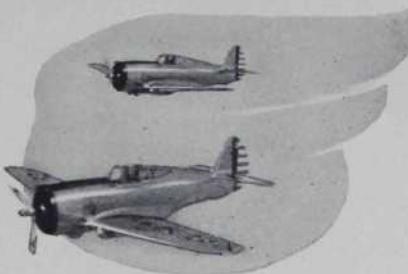
Earl O. Shreve, Vice President (right)
General Electric Company

"In 1939 it was estimated that about 70 per cent of this country's plant equipment was more than ten years old. Our industrial plants are handicapped by a backlog of obsolete machinery. . . . We must remember that, when this war is over, no matter who wins, we will be faced with competition from comparatively low cost labor and modern equipment. Great Britain has been installing new machinery and buying great quantities from us. It is true that much of it may be blown up but it is also reasonably certain that what is left will be new and up to date."

BENDIX * ECLIPSE

PIONEER * SCINTILLA

STROMBERG * ZENITH



Helping America PREPARE!

On duty . . . to the quickened new tempo of our nation's stride!

THROUGHOUT its quarter-century of service, Bendix has been an organization constantly building for the future . . . and now The Future has arrived.

Shoulder to shoulder with our co-workers of the aviation and automotive industries, our unstinted energies are directed to the Big Job—to make America invulnerable. And since, as an American, your prime interest is America's welfare, you will want to know: What makes up this organization—what does it build?

It consists today of more than seventeen thousand Americans, at work in fifteen modern plants in as many communities.

It builds *hundreds* of varied and vital aircraft, automotive and marine units—nearly all of a highly technical character, calling for true precision manufacture. To list them all here would not be possible. The names they bear—Bendix, Eclipse, Pioneer, Scintilla, Stromberg, Zenith, Cory—are known and trusted wherever men fly or drive or travel by ship. In behalf of these famous names, Bendix pledges sustained and speeded service to America.

ECLIPSE
AVIATION

PIONEER
INSTRUMENT

(Above) The night shift takes over . . . youth beside veteran for America's cause . . . fresh minds and muscles turn to a thousand tasks of utmost precision at the Bendix, New Jersey, plant of the Eclipse and Pioneer divisions (Right).



Bendix AVIATION CORPORATION

Plants at: BENDIX, N. J. • SOUTH BEND, IND. • BROOKLYN • ELMIRA, N. Y.
SIDNEY, N. Y. • BALTIMORE • NEW YORK • DETROIT • TROY, N. Y.
PHILADELPHIA • WAYNE, MICH. • BURBANK, CAL. • WINDSOR, ONT.



To

NEW ZEALAND AUSTRALIA

New Liner

AWATEA

Flagship of a famous fleet of 55 ships, with the popular

AORANGI

Monthly service from Vancouver to Honolulu, Suva, Auckland, Sydney.

Connections at Honolulu from California ports. Your own agent or Canadian Pacific: 41 offices in the United States and Canada.

Canadian Australasian

TRAFFIC AGENTS—CANADIAN PACIFIC



SERVING INDUSTRY FOR OVER 60 YEARS WITH dependable

CHICAGO
WATCHCLOCK
SERVICE

For more than
60 years the
Chicago Watchclock
Corporation

has devoted its entire
effort to perfecting Watch-
man's Clock Systems. Today,
the Chicago Watchclock is
the most perfect device for
safeguarding your plant and
checking the nightly rounds
of your watchman.

We point with pride to the
many installations of our ser-
vice. Over 60,000 users! This
service can tick off valuable
minutes of safety to you. Write

CHICAGO
WATCHCLOCK CORPORATION
1528 SO. WABASH AVE., CHICAGO, ILLINOIS
CALumet 4909
111 JOHN STREET, NEW YORK CITY

"big top" to connect all the units, and other tents can be outfitted as wards as they may be needed.

The army has trailers, large and small, for a variety of uses. There are mobile recruiting offices that can be parked on any city street or town square. A mobile headquarters for staff officers moves behind troops in the field. The speed of modern war suggests that trailers will probably be found indispensable for signal corps and field engineering work, for operations offices at temporary air fields, travelling repair shops, portable radio stations and so forth.

On Conduit Road, a few miles outside Washington, the Navy has its great proving basin. Inside the fence, beyond which civilian visitors are not allowed to pass, two objects can be seen. One is a huge structure that looks like a dirigible hangar, a great, silvery mound half a mile long. The other, looking very tiny by contrast, is a shiny new automobile trailer. Evidently the Navy has found uses for them, too.

What about the trailer coach as the home-on-wheels of golden promise and bitter disillusion? In spite of dire prophecy, there are more of them than ever. Something like a third of a million American families have pulled up stakes and taken to the road. The trailerites are an irrepressible tribe. They have their own fraternal orders and two magazines devoted to their interests. Many cities, among them New York, have schools that teach Pop how to drive with a trailer in tow and instruct Mom in the art of housekeeping on wheels. A publisher has brought out a cook book of trailer recipes and even interior decorators have things to say on the comparative advantages of Louis Quinze or Swedish Mod-

ern in the trailer home.

Trailers can be bought for from \$500 up to any figure you care to mention, with separate rooms, air conditioning, electricity, running water, shower baths, toilets, cooking and refrigeration facilities and—of course—Venetian blinds.

Washington's chronic housing shortage has caused a nimbus of satellite trailer communities to grow up around the city in the past few years. What happened recently in Bremerton, Wash., is an example of the way trailers may become a necessity in this fluid American economy. The opening up of defense industries brought hundreds of workers for whom no housing was to be had. First arrivals slept in tents, in trucks, on the floors of garages. Soon, however, trailers began moving in. Today a substantial part of Bremerton lives in them.

How can trailerites—the roving kind—give up the comforts of a settled life for the "hardships" of the open road? There may be a clue in the fact that the A.A.A. lists 4,000 tourist parks most of which make some provision for trailers in transit, while a trailer magazine lists more than 800 recommended "trailer parks" that provide electricity connections, pressure water systems, toilets, hot showers, laundry facilities and frequently community services of many kinds. Similar accommodations are to be had in scores of national and state parks.

One may still hear loud cries of pity for the poor vagabonds who live cramped up in a two-room trailer with electricity, running water, gadgets galore and all outdoors for a backyard. But they are likely to ring rather hollow in the ears of anyone who has spent much of his life bottled up in a one-and-a-half room city apartment.



"Stop. Do you belong to the carpenters' union?"

Labor Turns toward Politics

(Continued from page 17)

manufacturer who has no contract with labor and is trying to get production on defense orders. Labor regards him as fair game for organization. If he resists—and many will resist—public protests against strikes in war industries will not deter either the C.I.O. or A.F. of L. from using its economic power.

Trouble from dual unions

MANUFACTURERS have most to fear in the way of labor disturbances in the fields where dual unions flourish. The larger unions in either the A.F. of L. or C.I.O. are not threatened greatly with dualism. Some of the smaller unions may be more troublesome. The men who go down to sea in ships, for instance. The C.I.O. National Maritime Union has not succeeded in making much of a dent in the solidity of the A.F. of L. Seafarers International Union on the Pacific Coast. But the S.I.U. succeeded recently in breaking N.M.U. solidarity on the Atlantic Coast, using charges of Communist domination within the N.M.U.

Even in the smaller, dual unions, enough pressure can be exerted by the Government in cooperation with both A.F. of L. and C.I.O. to avert serious trouble. It is more than likely that the President can bring the A.F. of L. and C.I.O. sufficiently close together to form a joint committee to eliminate jurisdictional disputes. The N.L.R.B. can be effective as an aid to orderly procedure in determining collective bargaining agents. There would seem to be enough labor agencies operating in government to maintain orderly labor relations in spite of the A.F. of L.-C.I.O. split. Disputes will continue to be few in comparison with 1917 labor disputes.

Further government regulation of labor relations is a possibility in a state of war. Army plans call for a War Labor Board with power to dictate terms of settlement of disputes that cannot be resolved by existing machinery. Neither labor nor management relishes the idea. The A.F. of L. is taking steps to remove the necessity for more government dictation by calling on management to cooperate in a "no strike" policy for defense industries. But an employer must be organized to enjoy the "no strike" insurance.

Labor's main objective in its relations with government is to obtain representation for organized labor on all defense agencies and committees. As long as there is a feeling that workers are sharing in the direction and responsibility of defense, relations between labor and the Administration will be reasonably satisfactory. Should the workers feel, however, that business men are dictating policies without regard for labor's interests, the floodgates will be opened for a torrent of political action and someone like John L. Lewis would be trying to ride the political waves toward another new deal in government.

NO MORE DO ROLLER CHAINS

"Work their Hearts out" ON THE JOB



SILENT CHAINS ROLLER CHAINS FLEXIBLE COUPLINGS KELPO CLUTCHES

MORSE positive DRIVES

MORSE CHAIN COMPANY ITHACA N. Y. DIVISION BORG-WARNER CORP.



UP TO NOW, the weakest point in a roller chain was its heart—the pin and bushing surfaces on which the chain turns and operates.

Main cause of failures at the heart of the chain was lack of lubrication. Oil got to the heart of the chain in devious and uncertain ways.

Morse channel-lubricated, interchangeable roller chain has a force-feed lubricating system built into every link. Oil gets into the heart of the chain, wear stays out.

You'll get longer service and better service from a Morse roller chain. Next time, be sure it's a MORSE!

Do You Read Nation's Business Backwards?

Business men have been accused of reading magazines from the back to the front. This probably is exaggeration, and certainly is unkind to editors.

We believe Nation's Business readers begin at the beginning and read several articles. For such readers this issue has eight special features and nine departments designed to help you by their discussion of business news and current industrial development.

However, we not only admit, but insist, that advertising merits close

attention, particularly where it so closely supplements editorial matter.

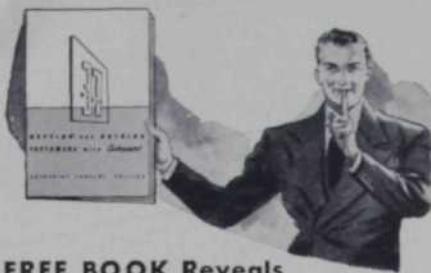
Between these covers you will find sixty-six advertisements offering products and services which enable you to conduct your business more efficiently and more profitably.

Forward or backward, Nation's Business is *all* business. If you haven't discovered that, perhaps you have been passing up extra dividends.

NATION'S BUSINESS

going to 348,220 men—the largest group of business buyers in America

How to Open NEW ACCOUNTS



FREE BOOK Reveals

37 Selling Secrets!

Learn how progressive executives open new accounts, hold old ones — how they build good will and sell "tough" buyers with imprinted **AUTOPOINT** products. Your name, sales message and trade-mark accurately reproduced on an **AUTOPOINT** product, keep pressure demanded daily, month after month. **AUTOPOINT** business gift plans make sales come easier. Write today for **"37 Sales Plans"** book and colorfully illustrated **AUTOPOINT** business gift catalog—sent to executives without obligation.

RETAILLED BY LEADING DEALERS



No. 155



No. 168



No. 5108

Nos. 155, 52GS and \$108 pencil made of BAKELITE molding material.

Autopoint
THE BETTER PENCIL

REG. TRADE MARK

Available for standard or Real Thin lead.

AUTOPOINT CO. 1818 West Foster Ave., Chicago, Ill.



No. 52GS

Too Dangerous for Use in War!

(Continued from page 42)

swarming streets in the past three years without an accident to the millions above, you get a somewhat different slant on this dreaded explosive.

Just fancy the idea of killing sharks with dynamite charges in a fashion which doesn't injure their skin for the tanners and you begin to get the idea.

Such things are difficult for us outside of the business to appreciate because they bespeak a subtle finesse and a hairline control of something we always think of in terms of stupendous destructive power. It is easy for us to grasp the fact that 92 miles of tunnels were dug from the Colorado River to Los Angeles in six years' time as contrasted to the more than 1,000 years it would have required without the help of dynamite. It is simple to see how one blast could, in a split second, open a river channel 28 feet wide, 12 feet deep and 1,700 feet long, because it is just such jobs for which we mentally accept dynamite. Yet contrast that with the widespread use of dynamite in fruit orchards where, when the soil is gently loosened before trees are planted, the roots are able to spread better, the soil holds water longer—and new trees bear fruit two seasons earlier than normal! Even old trees that have ceased bearing are frequently rejuvenated by the judicious application of a little dynamite in the earth.

Dynamite requires expert use

TRULY, dynamite is strange stuff. One pound of it properly placed can lift 2½ tons of hard rock. On the other hand, if you don't know how to use it, you can discharge 50 pounds and not get the result an expert would get with one pound. That fact has been demonstrated graphically in numerous cases of sweeping conflagrations where somebody has decided to check the advance of the flames by dynamiting a row of buildings in their path. In two cases to my knowledge enough dynamite was used to raze the entire city, yet the selected buildings still stood after all the shooting was over!

The obvious flaw was that inexperienced men were handling the blasting, because none of the big shots in the industrial explosives field would be guilty of such meager results with such an abundance of stuff.

On the other hand, disappointing results can just as easily be achieved by using too little. Serious ice jams in the Niagara River once threatened to inundate the city of Lewiston, and engineers who were working on the problem with dynamite found that they were getting nowhere so fast that they finally called in an expert. They had been firing charges of 50 pounds at a time and not getting enough cracked ice for cocktails. The big shot started out with charges of 1,250 pounds and then stepped them up to 1,500 pound blasts which broke the key of the gorge and saved the town.

From a job like that your expert may just as likely as not go down to South Carolina or Georgia and show them how to check soil erosion with dynamite—or out to Wisconsin or Minnesota to show them how to settle a highway over marshy ground. Formerly, you know, when a road was built through swampy territory, the fill was applied in installments over a period of several years while the roadbed gradually settled. Now they dump all the fill in at once, set off some well placed dynamite charges, and settle the road once and for all!

A material of many uses

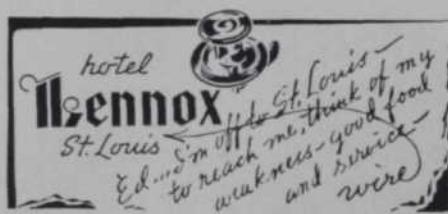
IN SHORT, there's practically no limit to the things they do with dynamite these days. Farmers remove rocks from their land with it; public utilities dig holes for power poles with it; foresters check woods fires with it; southerners collect turpentine wood with it; "frozen" bolts or nuts are even blown out of machinery; woodchucks are killed or sunken hulks removed from ship lanes. It's all in a day's work.

Perhaps one of the most dramatic applications of this explosive in recent years is its employment in prospecting, especially for oil. In this work, a charge of dynamite is buried in the earth and exploded—a charge that may weigh from a few ounces to 40 pounds depending on local conditions. At points from one to seven miles away delicate instruments have been previously placed to pick up the earth vibrations from the shot and record them photographically. From these records and from the known nature of the rock around the shot and the time required for the vibration to reach various points, scientists are able to locate deposits of oil and minerals with surprising accuracy.

From such a complicated assignment as this, however, it is nothing for dynamite to drop readily to the prosaic field of ditch digging—its most extensive agricultural application. By the so-called "propagation method," it is frequently possible to blow a ditch through a tangle of briars, weeds and shrubs in swamp land more quickly and cheaper than by any other method.

The usual technique is simplicity itself: holes are punched in the ground about 18 to 24 inches apart with an iron bar along the line of the desired ditch, and one or more cartridges are placed in each hole. In about the center hole one or two extra charges are deposited, one of them primed with a cap and fuse. And when this central hole is fired, the shock of that explosion sets off the charges on each side which, in turn, communicate this shock to adjacent holes almost simultaneously. Ditches up to 1,700 feet long have been dug by this method where the soil is wet and free from sand.

Such an application emphasizes the natural function of dynamite as a labor saving device—a function dramatized best in tunnel building. Back in 1835



You can get a
BINDER
for your copies of
NATION'S BUSINESS
for only **\$1**

AN inexpensive way to bind your copies of **NATION'S BUSINESS**. This binder is strong, practical and simple to use. No punching or marring of the magazine is necessary. A click and the copy is in. Any issue can be removed without disturbing the other copies. Holds twelve issues. Send your order today to **NATION'S BUSINESS**, Washington, D. C.

when the Philadelphia & Reading Railroad built its Black Rock Tunnel, they progressed through hard rock at the snail's pace of from 20 to 50 feet a month, using hand labor and black powder. At that time, this was a world's record. When the Cascade Tunnel was built in Washington from 1925 to 1928, using dynamite, they averaged 1,100 feet a month for three months for a tunnel 16 by 24 feet in size. Which is quite a difference! As a matter of fact, in the construction of the water tunnels under Chicago, each dynamite shot advanced them as far as a week's labor did in the Black Rock job a century before.

Clearly, dynamite is great stuff—IF! If you don't know it, you can get yourself into plenty of grief, because it doesn't take much of it to lift a 180 pound man right up to the Pearly Gates. Despite that, an average of 350,000,000 pounds of it a year have been shipped thousands of miles over American railroads since 1923 without a single personal injury accident.

If you do know your dynamite, you can do some trick and fancy blasting that smacks of the painstaking artistry of old Chinese embroidery. Blasting rock, for instance, doesn't seem like a very delicate task. Yet your expert blaster can often control the blast so that the quarryman who wants fine stone will have comparatively few big lumps while one who wants a rip-rap for a breakwater will have a minimum of fine material.

Removing the snow drifts

IN THE Rockies, as another case in point, they employ dynamite to help free the roads of snow in the spring. Each fall they close the highway through the National Park and place their charges. By the end of the winter that road is packed with 15 to 20 feet of snow and, when the time comes, they touch off their blasts and reduce the snow banks to depths which facilitate the task of the plows. The fact that they can do that without destroying the road itself certainly comes under the heading of finesse.

So, too, does that job up on the Saguenay River, in Quebec, where they were trying to build a power dam. At one particular spot the rush of water was so terrific that it promptly carried away the largest boulders they could dump in, making it impossible to lay any kind of a foundation from which to work.

For a time they were stumped until some engineer got a bright idea and called an expert blaster in consultation. With his O.K., they built a dam of concrete 92 feet high, 45 feet wide and 40 feet thick, standing it on end on one side of the river. The whole thing weighed 11,000 tons. When it was completed, the big shot unloaded a thousand pounds of dynamite, placed it where he knew it would do the most good, and set off the charge. Without deviating an inch from the plan, the 11,000 ton structure fell across the river and settled securely into its permanent position despite the fury of the savage Saguenay.

Thus was another impossible job accomplished with dynamite!

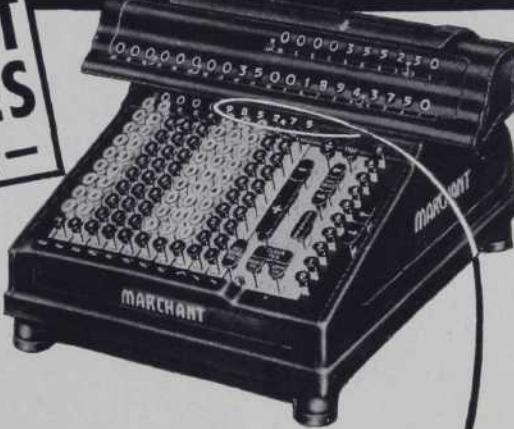
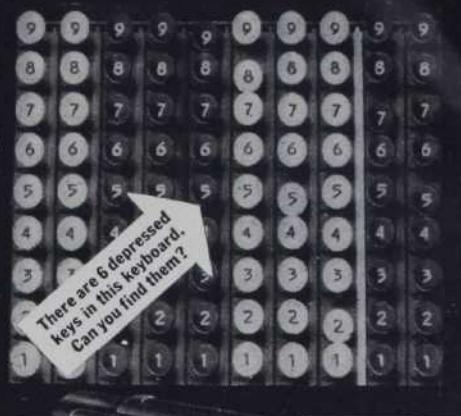
**IF YOU LIKE
PUZZLES—**

try hunting
for depressed keys
to check
figure entries!

**IF YOU DON'T
LIKE PUZZLES
IN YOUR FIGURING—**

use
**MARCHANT
CALCULATORS**

and get an instant, straight-line proof of accuracy of
ALL 3 FACTORS
including the KEYBOARD entry



DID you ever have to check figure entries through a zig-zag row of depressed keys? And then did you repeat the process all over again to make sure you were right? Consider the waste motion and increasing possibility of error as fatigue adds carelessness to confusion!

On the other hand, have you ever watched a MARCHANT operator sail through figure work?

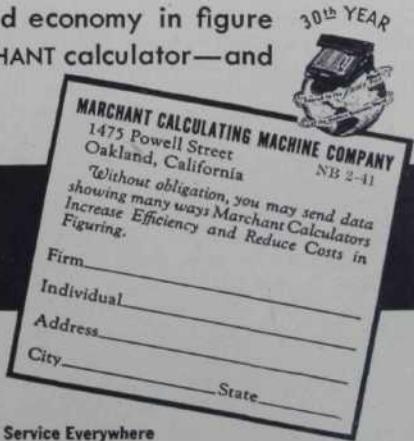
Here are no puzzles to work, for MARCHANT shows all three factors in easy-to-read figures right in plain view in three straight-line dials. No waste effort. Less fatigue and less possibility of error.

For proved efficiency and economy in figure work, always use a MARCHANT calculator—and know you are right!

**MARCHANT
silent speed CALCULATORS**

MARCHANT CALCULATING MACHINE COMPANY
Home Office: Oakland, California, U.S.A.

Sales Agencies and Manufacturer's Service Stations Give Service Everywhere





Thousands of rags are used to maintain efficiency on newspaper presses

Rags for Rent!



Background and scenery material from movie studios makes excellent wiping rags



Revolving wash tubs are divided into individual sections to keep customers' rags separate. Right shows attendant on job with clean rag



NEXT time you drive into a service station for a lubrication job observe the small, tough rags the mechanic uses to wipe off excess grease and oil. Until recently any old rag served the purpose, or maybe a piece of waste. The old-fashioned rags were thrown away, or burned. Not so the new-style rags. When soiled, they're tossed into a sack and periodically are taken back to the "laundry" for re-washing, the same as shirts, sheets and whatnots. And usually the same rags are returned, clean, at the next delivery.

Today the comparatively new wiping-rag rental service is a fast-growing industry. Service is the keynote of this novel industry's success and service stations, garages, publishing plants, and all kinds of industrial plants are cutting expenses by using standardized wiping rags over and over again—four to perhaps 30 times

before they are finally worn out.

When the junk, or salvage, man comes to your home, or plant, to carry away discarded rags, he'll probably sell them to a wiping-rag rental service plant. The plant then cuts them into standard sizes, removes pig tails, buttons, hooks, eyes, and either sells them or rents them out to manufacturing and industrial plants.

The rental service plants buy from mills standard-sized long leaf staple cotton or Turkish loop weave towels of various grades and weights, and flannel dust rags to be treated with hot wax. From salvage men and other sources they purchase flour sacks, sugar liners and other types of rags. Black background and scenery cloth is also purchased from motion picture studios. Then they contract with customers to supply them with towels or rags,

laundering them at specified intervals, for a certain price. Most of the plants operate fleets of delivery trucks.

The largest user of wiping rags is the United States Navy, followed by the Army and air service, railroad and bus transportation companies, service stations, municipalities, garages, machine and paint shops and others. One of the biggest individual users of wiping rags and towels in Southern California now are the airplane factories. Douglas Aircraft, for example, recently bought 100,000 shop towels and 10,000 pounds of mill ends from a Los Angeles rental plant. The shop towels were dyed blue, the hand towels green.

—MCDONALD WHITE



CAN YOUR WIFE READ THESE?

CAN she judge the ups and downs of the market? Can she determine the value of real estate? Does she know the value of your interest in your business? Can she—or can you—predict such values ten years hence? Can she judge which of your assets to liquidate should her liabilities mount larger than the cash in your bank accounts?

Difficult problems, these, for a widow confused by new and strange perplexities, dubious as to where to turn for counsel.

Yet these are problems which inevitably will confront a widow—your widow, perhaps, unless you yourself find the solutions, unless you put your estate—and its distribution—in order, *before* you die.

What part of this job is yours? What part can you entrust to your attorney? To a tax consultant? To trust officers? To a qualified life in-

surance underwriter? For each has a part in arranging the transfer of an estate if you would assure maximum conservation of your assets, minimum depletion through taxes and probate costs.

Often one of the best ways to avoid difficulties, losses, and delays is to make use of life insurance. A consultation with a Northwestern Mutual agent who specializes in financial planning will determine this and will put you in touch with estate settlement plans highly useful in the light of present day conditions.

Whatever your age or the size of your estate, write now for further information on estate protection. The Northwestern Mutual and its agents have for many years specialized in handling life insurance problems for men of means. Numbered among its present 700,000 policyholders there are probably many businessmen whom you know and who can tell you about this strong 82-year old institution.



MORE THAN
700,000 POLICYHOLDERS

We are THE NORTHWESTERN MUTUAL
LIFE INSURANCE COMPANY
MILWAUKEE, WIS.

WE'VE SURVEYED this TERRITORY TO HELP YOU



The Missouri Pacific Industrial Development Department is prepared to supply helpful information to industries considering plant expansions or seeking new locations in any of the eleven Central and Southwestern states served by Missouri Pacific Lines.

Competent engineers and technologists have studied raw materials, labor laws, taxes, transportation, markets, rate comparisons, warehousing facilities and other factors essential to the proper location of processing, manufacturing or merchandising establishments. Their findings are available for your use. Write for complete information —

J. G. CARLISLE
Director-Industrial
Development
St. Louis, Mo.

D. P. PACE
Land & Industrial
Commissioner
Houston, Texas



The OFFICE VALET

Ends Wardrobe and Locker Room Problems—SANITARY . . . SPACE SAVING . . . ATTRACTIVE

Bring office room efficiency into your office—save locker room floor space and locker room evils. A modern, attractive steel Office Valet provides complete accommodations (hats, coats, overshoes, umbrellas) for 6 or 12 people. Occupies no more space than an ordinary costumer.

"3-U" Valet Racks, in wall or 2-sided types, accommodate 3 or 6 persons per running foot. Fit in anywhere; any length. Walnut, Mahogany or Olive Green (16 special colors). Keeps wraps aired and "in press."

Write for Free Catalog

Showing complete line of modern steel office and home wardrobe equipment and name of local dealers.

VOGEL-PETERSON CO., Inc.
The Checkroom People
1809 N. Wolcott Ave., Chicago, U. S. A.

**SALES
FRANCHISE WANTED**

For District of Columbia,
Maryland and Virginia.

Seasoned executive seeks meritorious line offering interesting potentialities. Can satisfy concerning ability to operate soundly and build steadily-increasing volume. In position to make merchandise investment and finance promotional expenses.

If you want MORE BUSINESS, more effective representation on government matters or desire to introduce a new product, please give important facts. Address advertiser at P. O. Box 1327—Washington, D. C.

Washington—Our First Great Enterpriser

(Continued from page 20)

Washington was a diligent farmer and, therefore, according to the precept of Solomon, worthy to stand before kings. But he was also a sport-loving Virginia gentleman, fond of fox hunting, horse racing, lotteries, card playing, dancing and theater going. He did not have a Puritan conscience which, as has been said, does not keep one from doing wrong, but only keeps one from enjoying it. But he had a high sense of personal honor which performed for the Virginian what a conscience did for the New Englander. Again, while extraordinarily fond of all popular amusements, he did not permit them to interfere with the serious business of farming.

Washington was kept busy

WHEN we consider the time which he must have spent in these active amusements, the meticulous care with which he kept his accounts and his journals, the wide variety of his business interests, the extent of his personal correspondence, written in his own excellent script, the scores of visitors whom he entertained, the mystery is: How did he find time to do it all?

To begin with, he was methodical, budgeting his time carefully. When at Mt. Vernon he spent many hours every day in the saddle, either hunting or riding over his estate, supervising every-

thing. So many visitors came to Mt. Vernon that he was compelled to make a rule that he could see them only in the late afternoon and early evening, after the business of the day was done. The late evening was spent with his accounts. While not an abstainer, he was moderate both in eating and drinking. While subject, under provocation, to outbursts of temper, he did not fret or worry, but maintained a serene emotional balance.

He was known to possess great physical strength. He must also have possessed enormous vital energy to have kept so busy and to have accomplished so much. Yet he had rather frequent illnesses, including smallpox when a youth. His teeth especially must have been a drag. During early middle life he suffered torments from that scourge of mankind, toothache. After his teeth were extracted he suffered other torments from ill-fitting store teeth.

The merciful profession of dentistry was still in its infancy. That dental plates could be held in place by atmospheric pressure was not discovered until 1800, the year after his death. His own store teeth were opened by springs and closed by the pressure of his jaws. Besides making his mouth sore, they made it difficult for him to laugh or even to smile. This may account for the preternatural solemnity of his later portraits.

One of his productive enterprises of a public or semi-public nature was a pro-



"I represent the bus company—he's a government man."

ject for uniting the Chesapeake, by way of the Potomac, with the Ohio and Mississippi Rivers. He began pushing this project before the War of Independence. Immediately after the war he made a trip on horseback over the entire route, this time not as a soldier, but as a surveyor, enterpriser and investor.

He helped organize the Upper Potomac Improvement Company, circulated a paper to get subscriptions for stock, invested \$10,000 of his own money in it, and was elected president of the company. Thus, according to Joseph Dillaway Sawyer, he promoted, surveyed and helped build the first large canal in the United States. He thus inaugurated that era of canal building which continued until railroad building opened a wider and more productive field for American enterprise.

Reclaiming swampland

ANOTHER early enterprise was the draining of the Great Dismal Swamp. A company was formed in 1763 by George Washington and 11 others for the reclamation of that swamp. Washington was chosen manager. He spent a great deal of time in the next five years exploring and surveying the swamp. The project was not completed in his time, but some short canals were built and a great deal of timber was cut, sawed and marketed.

These were not get-rich-quick schemes, or enterprises designed to enrich the promoters alone. They were productive enterprises that benefited the public quite as much as those who actively promoted them. The country had not reached that stage of degeneracy where it is thought that a business that enriches one must necessarily impoverish others.

Mention has already been made of Washington's fondness for gambling on cards, lotteries and horse races. He did not gamble heavily, however; he didn't need to. He got thrills enough in war, business, and politics to satisfy reasonably well even his adventuring spirit. Besides, he did not gamble with other people's money. The estate of his stepchildren, of which he was made trustee, he managed with such care and skill that it doubled in value during his trusteeship.

The gambling spirit, like every other human propensity, may be harnessed to the public good by directing it into productive enterprises. There is risk in every new business venture. If no one took such risks we should all starve. It is to the interest of everybody that these productive risks should be undertaken. When the gambling spirit is directed into such enterprises, it does not need to seek unproductive fields. But, when constructive business risks are discouraged, the gambling spirit will break out in useless or harmful ways.

Productive enterprise is discouraged when every would-be enterpriser knows that, if he starts a new enterprise and fails, the loss is his alone; but, if he succeeds and makes money, the Government will take it away from him and call him hard names besides. When productive enterprise is thus discouraged, the country will be filled with gambling schemes that produce nothing. There is

DUNHAM

has made

HEATING
SERVE YOU
BETTER

since

1903

We present our case — on Results

YOU are today enjoying the results of Dunham pioneering whether or not there is a Dunham Heating System in your building, for the Dunham Thermostatic Trap paved the way for all modern heating systems.

If in your office you escape the overheating, common in all heating prior to 1927, you benefit by the results of Dunham Research, Dunham Invention, and Dunham Manufacture, for Dunham has steadfastly fought the waste and inefficiencies of high-temperature-steam-heating, has steadily raised the standards of heating equipment and heating performance.

Results—the end you seek in heating equipment, or heating systems—are available to you through Dunham Heating Service, which applies to your every heating problem and blends many functions into a single result—Good Heating.

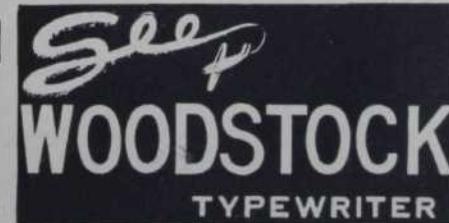
"Dunham Heating Service" is available through the telephone in more than 60 cities, or by correspondence to . . .

C. A. DUNHAM COMPANY
450 E. OHIO STREET • CHICAGO, ILLINOIS

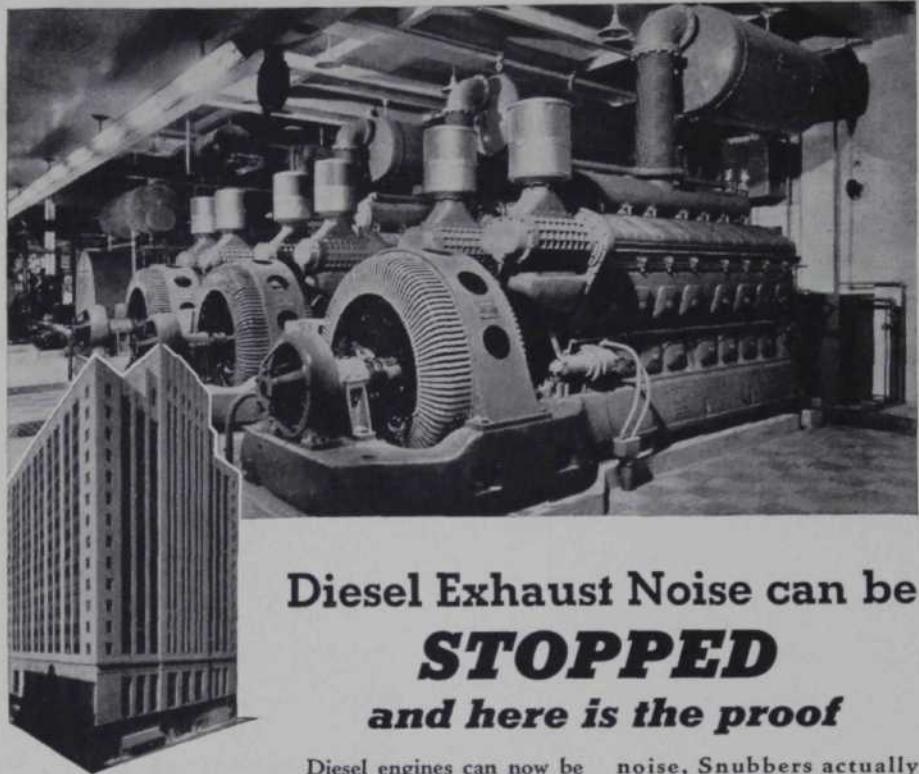
SUB-ATMOSPHERIC STEAM SYSTEMS DUNHAM LOW PRESSURE STEAM APPLIANCES VACUUM AND CONDENSATION PUMPS UNIT HEATERS CABINETS

DUNHAM
HEATING SERVICE

AND CONCEALED CONVECTORS PACKLESS RADIATOR VALVES THERMOSTATIC RADIATOR TRAPS FLOAT AND THERMOSTATIC TRAPS DRIP TRAPS RETURN TRAPS



AMONG the 348,220 paid subscriptions to Nation's Business are more renewal subscriptions than any other business magazine has total circulation.



Diesel Exhaust Noise can be **STOPPED** and here is the proof

These big Diesels operate without exhaust noise in the new duPont building, Miami, Florida. They are equipped with Burgess Snubbers.



Sectional view of Burgess Exhaust Snubber, showing snubbing chambers which convert noisy exhaust impulses into a smooth, quiet stream.

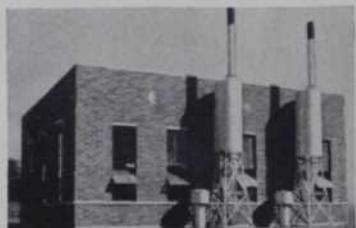
Diesel engines can now be used in business or residential districts without fear of exhaust noise complaints. Exhaust noise can be prevented... just install Burgess Exhaust Snubbers.

Burgess Snubbers operate on the Snubbing Principle of exhaust quieting—originated by Burgess. They give you complete silencing on any engine. No tuning is required.

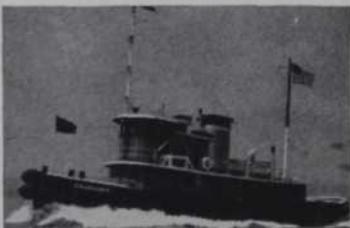
Instead of muffling exhaust

noise, Snubbers actually prevent it. Exhaust gases are passed on to the atmosphere in a smooth, quiet flow, not in noisy impulses. There is no atmospheric impact. Engine performance is not impaired.

Whether your Diesel plant is large or small, Burgess Snubbers will give you freedom from exhaust noise. Consult our engineers about your exhaust problems.



Lamoni, Iowa, Municipal Plant uses Burgess Snubbers to insure quiet Diesel exhausts.



On shipboard—the powerful tug "Crusader"—Burgess Snubbers give a clean, quiet exhaust.

Burgess Battery Co., 508 W. Huron St., Chicago, Ill.
Originators of Snubbing Principle for Quieting Diesel Exhausters—Pat. and Pats. Applied For

II BURGESS SNUBBERS II

when the
NATION'S BUSINESSMEN
go to Washington

RATES FROM \$5

THE
Carlton



16TH AT K STREET • WASHINGTON, D.C.

...DATA
in its most
AVAILABLE
form

MULTIPLEX
Fixtures form the
simplest and most convenient
method of keeping maps, charts,
photos, advertising, and similar data
available for instant reference. Ideal
for conference room presentations or
keeping graphic records. Write for
descriptive literature.

MULTIPLEX DISPLAY FIXTURE CO.
926-936 N. 10th St., St. Louis, Mo.

no more fun in the risks of productive enterprise than in the risks of gambling unless there are prizes to be won.

If there are large prizes, either material or immaterial, to be won, adventurous men will take large risks, endure great hardships and face great dangers in the hope of winning. It was this which sent Columbus westward across the Atlantic, colonists to America, pioneers into the great West, and gold seekers to California.

If Columbus could have foreseen that the Government would snatch the prize away from him, and heap contumely upon him, he would not have undertaken his epoch-making voyage. If gold seekers had been told that, if they failed to find gold, the hardship and loss would be their own, but if they found gold, the Government would take it and call them economic royalists, there would have been no gold rush. Neither, under the same conditions, would American enterprise have expanded our industries and built a great industrial system that put multitudes of luxuries within the reach of the common man.

Risks may be unproductive

THIS does not mean, however, that there would have been no risk taking. It would merely have broken out in other and less productive forms. It is, in some respects, like a law of nature that, in proportion as productive enterprise is discouraged, artificial and unproductive risk taking will increase. The past few years would seem to illustrate this law. Our people have been driven out of productive adventuring into all sorts of cheap and useless gambling.

Washington also speculated in land, at one time owning as much as 50,000 acres. Rupert Hughes, in his illuminating study of the life of Washington, says:

It is only now coming to be realized how largely history has been a matter of land speculation.... It is an undeniable truth that, in the settlement of the Mississippi Valley and the Ohio River, which was part of it, land speculation led the way. Two of the leaders were men whom the average American never dreams of as business men and speculators, Benjamin Franklin and George Washington.

Certain other historians, or rather propagandists who write in the guise of historians, comment on these facts as though they had discovered a mare's nest. They seem to imply that a republic thus founded can scarcely be a sound republic. They are so desperately afraid that some one will make money that, to prevent it, they are willing to keep the country poor.

It is related in the New Testament that some one once asked: "Can there any good come out of Nazareth?" A very logical person answered: "Come and see."

If we take an equally logical attitude toward the fact that our Republic was founded by such diligent and successful business men as George Washington, John Hancock, Benjamin Franklin, Robert Morris and a multitude of others, we shall not ask: "Can there any good thing come out of business?" We shall, rather, take the advice: "Come and see."

If we do, we shall see that a great many good things actually did result from the work of those active business enterprisers who founded our Republic.

We have it on high authority that "By their fruits ye shall know them." Seeing that such excellent fruits did result from the work of such diligent business men, we may logically conclude that such men are the best kind to found republics. The opposite conclusion could be based only on the premise that the interests of business are in conflict with those of the general public. The founders of our Republic did not believe that. They knew that American enterprise had been cramped, first by the French occupation of the Ohio Valley, later by oppressive regulations by the British Government. They fought to free themselves from these restrictions.

The government whose restrictions irked our revolutionary forefathers was a foreign government in the sense that its capital was on the other side of the Atlantic. But restrictions may be quite as irksome and repressive of enterprise when they emanate from a bureaucratic government whose capital is on this side of the ocean.

When these restrictions were finally removed and American enterprise was released, there followed such an outburst of productive energy as the world had never seen. It continued for a century and a half. The results in expanding employment and rising standards of living for millions upon millions of people need not be enumerated here. We all know them.

Others were rich in resources

WE WERE, of course, blest with a rich strip of territory. But there were other rich territories in the Western Hemisphere and elsewhere. But nowhere else have rich natural resources been developed and utilized with such energy or intelligence as here.

Nowhere else was enterprise so free from restrictions as here. There may be a connection.

Science and invention have played their part, but we did not, until well into the Twentieth Century, lead the world in either science or invention. We did, however, lead the world in placing the results of science and invention within the reach of millions of people. This special achievement was not the work of scientists and inventors alone. If it had been, England, France, Germany and Sweden would have outstripped us. But American enterprisers, of whom George Washington was the most illustrious example, found ways of bringing the results of science and invention to the masses at prices which they could afford to pay.

Both as a soldier and a statesman, Washington had his critics and even his bitter enemies. He had to contend not only against hostile armies but against traitors and even misguided friends. He faced difficulties and discouragements enough to break the spirit of a less courageous man. But he never despaired of the republic.

Others grew discouraged and said, "What's the use? Why not accept the

Butler Railway Repair Shop, 40' x 160' x 22'. Proved Its Structural Strength By SURVIVING A TORNADO.



BUTLER READY-MADE STEEL BUILDINGS SPEED UP YOUR DEFENSE PRODUCTION

The housing of space in which to expand defense production, storage and services is a problem which, no doubt, you are anxious to solve with a plant investment which can be charged off quickly.

Butler Ready-made Steel Buildings have and are providing a speedy solution to this increasingly pressing problem in many industries. Prefabricated of steel by skilled factory organizations with 25 years of experience, Butler Steel Buildings come to you complete, ready to install in days instead of weeks. Large or small, they afford permanent, fire-safe housing readily insulated, heated or air-conditioned. Yet, they are easily enlarged later—or taken down and re-located with full salvage.

Three large Butler factories enable us to offer delivery schedules that are still relatively favorable.



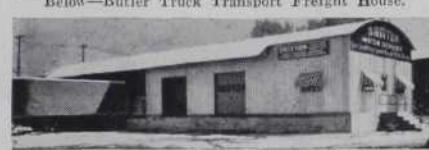
At right—Truck Garage at large Army Depot.
Below—Insulated Machine Shop at River-Rail Elevator.



Above—Butler Truck Fleet Garage equipped with 3 overhead doors.



Above—Butler Airplane Hangar typical of many in use.



Below—Butler Truck Transport Freight House.



Below—Interior of lined and heated Railway Fruit Handling Depot.



FREE! Send Today for the Butler Book of Steel Buildings showing a hundred different installations in a score of industries. An outline of your requirements will set Butler engineers to tailor-measuring plans to fit and figure to save 3 ways.

BUTLER MANUFACTURING COMPANY
1240 Eastern Ave., Kansas City, Mo. • 940 Sixth Ave. S.E., Minneapolis, Minn.
SALES OFFICES IN PRINCIPAL CITIES

The Case for Investment Banking
The Case for Distribution
Your Automobile and Free Enterprise
The Case for Industrial Chemistry

Reprints of these special articles available at 10c each; \$6 per hundred;
\$50 per thousand. Supply limited. Write



But . . . not as quickly
or as cheaply as . . .

Autocall PAGING SERVICE

Do your "man hunting" the quick, efficient, economical way with Autocall Paging Service. Busy men are on the move, they can't stay chained to their telephones. And it isn't necessary, for with Autocall they are instantly "told" when and where they are wanted . . . no searching . . . no lost time . . . no interrupting others. . . .

THE AUTOCALL CO.
204 PARK AVE., SHELBY, OHIO

Paging Service
Fire Alarm Service
Sprinkler Alarm Service
Combined

A penny post card will bring free booklet telling why it pays to use Autocall Paging Service . . . how you can try it without cost. Then, if you like it, how you can lease or buy it.

situation as it is and make the best of it?"

But not he!

In business he showed the same fortitude. There were such difficulties as a depreciating currency, a post-war slump which brought wholesale bankruptcy, contested land titles, defalcations of debtors, but they never broke either his spirit or his business. He never lost faith in the system of free enterprise for which he had fought.

This system was fought for not only by large enterprisers, but by small business men, by farmers, mechanics, sailors and common laborers. They all saw and understood that their own prosperity, as well as that of the great enterprisers, was at stake.

Class hatred had not yet developed to the point where it could be believed that the way to help labor was to hurt business. That strange and suicidal doctrine was reserved for a later generation of sophisticates.

Men with great capacity for leadership were needed in the struggle for independence. It could not have been won without them. They were drawn largely from those who had achieved great leadership in the works of peace—including business. It would have been strange if it had been otherwise. To condemn

such leadership is evidence of a jaundiced mind.

All prosper together

THERE is no reason to doubt that those great business men expected to prosper more under national independence than under the restrictions placed upon them by the British Government. But the same conditions that would open wider opportunities for themselves would also open wider opportunities for millions of others. The practical men of that day, both rich and poor, understood this and accepted it as a matter of course.

Among older and less democratic peoples, class hatreds were already developing. They have lately been spreading to this country. As these hatreds develop, the feeling spreads that freedom of enterprise is only to the advantage of a few who want to be enterprisers. As well say that freedom of speech and the press is only to the advantage of those who want to talk, write or publish.

Workers are interested in freedom of enterprise because employment cannot increase until industry expands. Industry cannot expand until enterprise is released. Enterprise can only be released under a government that appreciates its importance and encourages it.



Why 12 Salesmen Got ACE STAPLERS

Orders! Reports! So mixed up—often LOST, it drove the Boss frantic, so he got his Salesmen ACE Staplers. Now, with things stapled together, losses are nil, service improved, accounts held.

ACE Staplers prevent losses in Offices and Homes too! They STAPLE—PIN—TACK, are all-steel, precision built and cannot jam or clog. For Protection and Efficiency with Lifetime Guarantee of stapling performance, order ACE for OFFICE and SALESMEN.

Write for Circular describing HAND,
FOOT & ELECTRIC MODELS.

ACE SCOUT \$1.00
Loads: 105 Staples
BOX 1000
STAPLES
25c



ACE GLIDER \$1.50
Loads: 210 Staples
ASK for ACE! ORDER ONE ON 10-DAY TRIAL

ACE FASTENER CORPORATION
Makers of the World's Best Stapling Machines
3415 N. Ashland Ave. Chicago, Ill.

Preparedness in the front office



James S. Knowlson (left), president of Stewart-Warner

Mr. Knowlson: "We have decided that the only possible hedge we have against economic warfare, after the physical combat has subsided, is to disregard largely the present sensational increase in business. To disregard largely the accompanying increase in profits, and to try, so far as we can, to measure the success of the coming years, not by the balance sheet which will impress our stockholders and our banker friends, but by the number of new devices which our engineering talent has been able to develop, by the number of new accounts we have been able to open, and by the new fields into which we have been able to penetrate."

Already there are signs of returning sanity. In 1939, the National Council of the American Federation of Labor published a statement to the effect that there can be no increase of employment or of wages until confidence is restored and production is increased. The Steel Workers Organizing Committee, a branch of the C.I.O., not long ago told its members that future wage increases would depend on increases in labor efficiency. Whatever the lesser leaders may say or do, it seems that the heads of these labor organizations are, on that point at least, in agreement with every great business organization.

Labor statesmen and all other informed persons know perfectly well that there is more for labor to fight for when industry is well managed and the product per worker large than there is where industry is poorly managed and the product per worker small. No organization, however powerful, can extract high wages from an industrial system where the production per worker is low.

It is also well known that the reason wages are higher in this than in other countries is not because labor is better organized here, but because the product per worker is higher here. It is certain that, if the product per worker in this country should ever fall to the level of other countries, wages must likewise fall. The only thing that can keep the product per worker higher in this country is to keep it under the management of men who are skilled in the organization of productive enterprises rather than in the arts of the politician.

Leading men in both of the old political parties also agree that there must be increased production and that this requires the unshackling of American enterprise.

With the support of the top men in the labor movement and the leading men in the old political parties, and with the illustrious example of our first great enterpriser, George Washington, business men should rejoice and take courage in the fight for private enterprise.

Business men may think that their only job is to manage their businesses. If so, they are mistaken. They have also the job of preserving a system under which they may have a business to run.

Price-fixing Troubles

RESALE price maintenance is urged upon manufacturers by retailers but after the manufacturer has gone "fair trade" the same retailers do not back him up with their cooperation, Paul S. Willis, president of the Associated Grocery Manufacturers of America, told a California grocers' convention recently. Retailers who formerly featured the manufacturer's brand in their advertising and displays turn to others after it has been price-fixed. The reason, of course, is that the dealers like to feature a brand on which the price can be shaved. It might be said that their devotion to price-fixing is more in the abstract than the concrete.

Your Family's Defense Program

Safest protection against economic distress, for the business man's wife and children: adequate insurance on his life.

Ask about our many low cost policies.



The Prudential
Insurance Company of America

Home Office, NEWARK, N.J.

Advertisement

A Business Machine



Arnold Genthe

INTERNATIONAL BUSINESS MACHINES CORPORATION
World Headquarters Building, 590 Madison Avenue, New York, N.Y.

Resource-Full WEST VIRGINIA



offers STRATEGIC LOCATION



Transportation: Rail, motor freight, water, bus and air provide quick, dependable service to all parts of U. S.

Resources: Coal, Natural Gas, Petroleum, Limestone, Silica Sand, Salt Brines, Clays, etc. in abundance.

Labor: 90.6 per cent native born, loyal, and intelligent; employed in nearly 3,000 occupational classifications.

Geographic Location is one of WEST VIRGINIA'S major (and most unusual) industrial advantages. Half the population of the U. S., many of the Nation's largest industrial centers are within 300 miles of its borders.

WEST VIRGINIA is "inland", yet the East is readily accessible. So are the North, South and Midwest. WEST VIRGINIA'S resources and finished products, too, are practically unlimited in potential productiveness. Many of them are of basic importance in filling today's accelerated industrial demands.

Industries seeking new manufacturing sites may profitably consider the "self-sufficient" State first—strategic WEST VIRGINIA!

For more detailed information on this stable, favored State write:
Industrial Development Committee,
Dept. NB 1, Capitol Bldg., Charleston

Index of ADVERTISERS February • 1941

	Page
Ace Fastener Corporation	86
Addressograph-Multigraph Corporation	43
Aetna Life Insurance Company	3
Air Transport Association of America	8
Aluminum Company of America	3rd Cover
American Mutual Liability Insurance Co.	6
American Telephone and Telegraph Company	2nd Cover
Armstrong Cork Company	62
Association of American Railroads	10
Autocall Company	86
Autopoint Company	78
Bendix Aircraft Corp.	75
Burgess Battery Company	84
Burroughs Adding Machine Company	31
Butler Manufacturing Company	85
Canadian Pacific Railway Company	76
Carlton Hotel	84
Chase National Bank, The	51
Chesapeake & Ohio Railway Co.	4
Chevrolet Motor Company	37
Chicago Watchclock Corporation	76
Chrysler Corporation	45
Commercial Credit Company	63
Cutler-Hammer, Inc.	61
Dunham, C. A. Company	83
Ediphone, The Thomas A. Edison, Inc.	71
Erie Railroad System	73
Fairbanks-Morse & Company	2
Felt & Tarrant Mfg. Co.	35
Ford Motor Company	14
Fruehauf Trailer Company	49
General Electric Company	89
Goodyear Tire and Rubber Company	12
Hartford Steam Boiler Insp. & Ins. Co.	9
Household Finance Corporation	11
International Business Machines Corp.	87
Kimberly-Clark Corporation	57-58-72-4th Cover
Lennox Hotel	78
Lumbermens Mutual Casualty Company	47
Marchant Calculating Machine Co.	79
Mayfair Hotel	83
Metropolitan Life Insurance Co.	33
Missouri Pacific Lines	82
Morse Chain Company	77
Multiplex Display Fixture Company	84
National Board of Fire Underwriters	55
National Cash Register Company	53
Nation's Business	77
Nebraska, State of	90
Norfolk & Western Railway Company	7
Northwestern Mutual Life Insurance Co.	81
Pennsylvania, Commonwealth of	65
Philco Radio & Television Co.	52
Pittsburgh Plate Glass Company	41
Plymouth Motor Corporation	1
Postage Meter Company, The	64
Prudential Insurance Company	87
Radio Corporation of America	66-67
Republic Rubber Company	48
Victor Adding Machine Co.	79
Vogel-Peterson Co., Inc.	82
West Virginia Publicity Commission	88
Western Electric Company	39
Woodstock Typewriter Company	83
York Ice Machinery Corporation	69

IT HELPS
to sell more jewelry . . .

83 footcandles of fluorescent lighting speed sales in Pugh Bros., Jewelry, Youngstown, O. A special installation of filament lamps gives extra sparkle to diamonds. R. F. Medicus, Architect.



IT HELPS
to make airplane parts faster

Fluorescent lighting steps up seeing for the manufacture of LORD Dynafocal Suspensions for airplane engines, in the plant of the Lord Manufacturing Company, Erie, Pa.



... it's the amazing new
G-E FLUORESCENT LIGHTING!

Here's a practical way for any business, big or small, to step up its lighting and enjoy the benefits of easier seeing . . . at surprisingly reasonable cost.

It's the next thing to rolling back the roof . . . and it's good 24 hours a day if you wish.

How it can help you

Properly installed* fluorescent lighting with G-E MAZDA "F" lamps brings you "indoor daylight" . . . new higher levels of lighting . . . fifty footcandles and more . . . cooler light and pleasing light . . . for easier seeing,

easier selling, better work. Hands work faster, store traffic grows heavier, customers buy more readily . . . people feel better, errors, spoilage, accidents decrease . . . because eyes see better, with less strain. Here's help for production line and for corner beauty shop!

Investigate now

Why not see what possibilities fluorescent lighting holds for helping your business? Ask your local electric service company or G-E MAZDA lamp distributor to tell you about lighting fitted to your needs, with G-E MAZDA "F" lamps . . . the kind made to stay brighter longer!

*For sound advice on the right fixture for the right place, consult your local electric service company or G-E MAZDA lamp distributor

G-E MAZDA
"F" lamps now
at new low prices.



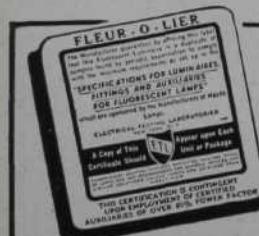
G-E MAZDA LAMPS
GENERAL ELECTRIC

To assure you top performance from this new lighting

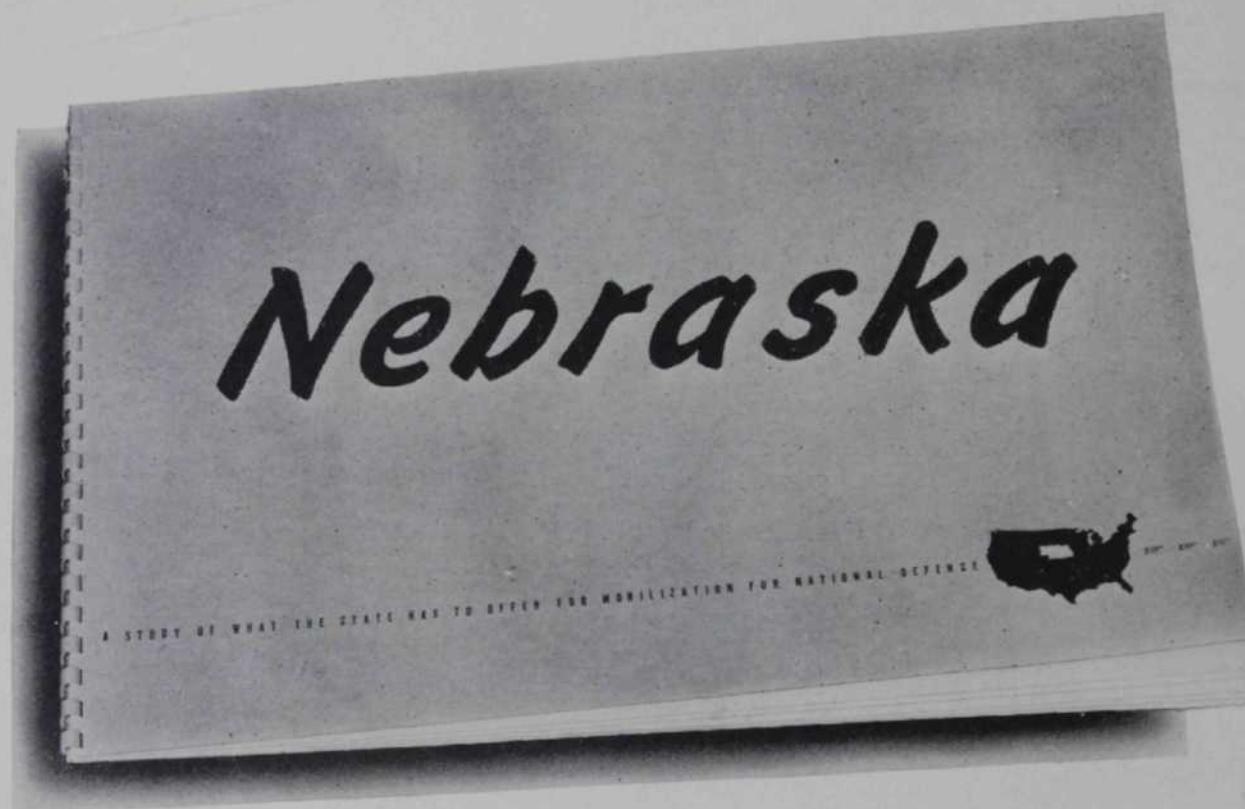
... a wider choice of lighting fixtures . . . and lighting fitted to your individual needs, General Electric cooperates impartially with many manufacturers rather than itself making fixtures. So, in your interest, G-E recommends fixtures bearing the FLEUR-O-LIER label shown at left, or the RLM label. These

lighting units together with their ballasts and starters, when certified by Electrical Testing Laboratories to comply with exacting specifications, assure the purchaser of balanced, satisfactory performance.

These fixtures are sold by G-E MAZDA lamp distributors everywhere.



SAFE... for Defense Industries



Consider Nebraska's location! It offers the utmost in natural protection for defense industries. In the special Defense Brochure shown above, sent free on request, are maps that show why Nebraska is safe. Over a thousand air miles, for instance, lie between Nebraska and either sea coast. International boundaries are hundreds of air miles away in either direction. But defense-wise, Nebraska offers many other advantages, too. Labor here is skilled, friendly and coop-

erative. Nebraska workers want to do their part. Nebraska's transportation facilities include twelve major railroads, a vast network of safe, paved highways, and inland waterways. There are several major air routes and abundant approved air fields. Ample, cheap electric power is everywhere! Cheap natural gas can be had in 154 Nebraska cities and towns.

If you are helping to locate defense industries, be sure to consider Nebraska!

NEBRASKA



Write for This New Defense Brochure

Especially prepared for executives. With complete information about Nebraska's advantages for defense industries and military operations, this brochure tells an interesting story. Write on your letterhead for this new book on America's "White Spot."

Nebraska



NO SALES TAX • NO INCOME TAX • NO BONDED DEBT
• NO OTHER EXTRA TAXES • MORE MONEY FOR LIVING

NEBRASKA ADVERTISING COMMISSION
State House, Lincoln, Nebraska



A war is loose in the world. Men and metals must be drafted to meet a dire emergency.

The biggest job aluminum has right now is to help defend America. For that job, this nation needs more aluminum than was ever used before.

To provide that amount of aluminum the industry must now more than double, in a matter of months, the production facilities it had built up through more than half a century.

Aluminum Company of America, as part of the industry, has undertaken to carry out now a program of expansion which in normal times would require two decades.

This company alone is investing over one hundred and fifty million dollars in new factories . . . new mills . . . new machinery . . . new dams . . . new power projects . . . new ships.

From the 1939 all-time annual peak production of 327,000,000 pounds, Aluminum Company of America expects to be producing at the rate of more than 700,000,000 pounds per year before the end of 1942.

But in the meantime, defense requirements come first. As an example, the railroads who use aluminum for streamlined trains may have to wait for the aluminum alloys which would be supplied promptly in normal times. The very qualities which make aluminum desirable for streamlined trains are among the factors which make it so valuable for the defense program . . . and which give defense a prior call on the metal immediately available.

If you find it difficult at the moment to get all the aluminum you want, when you want it, you will know that aluminum has gone off to defend your home and your country.

When we supply aluminum for National Defense in this crisis, your business and your family are served in an infinitely deeper sense than if the aluminum actually went to you.

And when the emergency is past, there will be more aluminum than was ever available before . . . lower prices . . . and more ways in which aluminum can serve industry and the nation.

COMING:

A Prevue of Aluminized America

When war is done . . . when peace is here . . . when people and markets are once more free . . . you will see such an upsurge in the use of aluminum as to make this in a very real sense an Aluminized America—lighter, brighter, and more efficient.

What will an Aluminized America mean to industry, agriculture, and the American home?

Some of the things it will mean are still locked in the minds of research men and development engineers. But some are very plainly indicated. In future advertisements in this space, we hope to show you some of the trends that may affect all of us. In one way or another, they will all grow out of

Aluminum's Economic Advantages

Here are 12 of them:

Light Weight	Workability
High Resistance to Corrosion	Non-magnetic
High Electrical Conductivity	Non-toxic
High Reflectivity for Light and Radiant Heat	Strength in Alloys
High Conductivity for Heat	Non-sparking
	Appearance
	High Scrap and Re-Use Value

This, then, is a prevue of a prevue

ALUMINUM COMPANY OF AMERICA



AS RADIANT AS
REFLECTIONS
ON STILL WATER—



Your Product's Beauty Is Pictured on *Levelcoat** Printing Paper at Less Cost!

While the new *Levelcoat** printing papers were manufactured primarily to provide a smoother, better printing surface, Kimberly-Clark has, at the same time, achieved a new economy in coated paper making, and now important savings are available to all buyers of printing. For with this entirely different, new formula coated paper, you obtain *all the beauty of costly printing paper at the price of ordinary paper!*

If you have been buying highest quality printing, you now can buy more printing at the same price by specifying *Levelcoat* papers: Trufect,* Kimfect* or Multifect.*

On the other hand, if you have a

small budget for printing which has limited you to not-so-good appearing catalogs, circulars and brochures, you now can step-up to *Levelcoat* quality paper at little, if any, extra cost!

Seeing is believing—Ask your printer or paper merchant to show you samples of this unique paper, or write Kimberly-Clark for proofs of printed results on *Levelcoat* papers—results heretofore obtainable only with high-cost printing papers. You'll agree, these new-type papers do most for the money! They are available through your paper merchant. If you prefer, inquire direct.

*TRADE MARK

Levelcoat Papers for smoother,
better Printing

Trufect*
Levelcoat Paper

Kimfect*
Levelcoat Paper

Multifect*
Levelcoat Paper

A grade to fit your needs and your budget

Manufactured by

KIMBERLY - CLARK CORPORATION · NEENAH, WISCONSIN

NEW YORK—122 East 42nd Street

Established 1872
CHICAGO—8 South Michigan Avenue

LOS ANGELES—510 West Sixth Street